

Understanding the meaning of a digital school from the perspective of primary school teachers

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Abstract

The Escol@s Digitais Project, under development in all public primary schools of Amadora Municipality (Portugal), aims to support the process of digital transformation in school dynamics. In this article, we examine the meaning that the teachers who participate in this project attribute to the “digital school” concept. For this purpose, we mobilized a corpus of qualitative data obtained through an online questionnaire that included an open question, formulated in the following terms: “What do you think a ‘digital school’ could be?”. The analysis carried out, with peer validation, highlighted three dimensions that help us to understand the “digital school” concept in a holistic way: the first dimension underlines the elementary requirements to ensure the digitalization process in schools (strategic dimension); the second dimension highlights the pedagogical potential of digital tools (pedagogical dimension); and the third dimension emphasizes a set of values and principles by which any school, more or less digital, should guide its action (axiological dimension). In conjunction with the results of recent studies, it is concluded that the ongoing digital transformation process, despite being complex and multifaceted, is necessary to raise education to a qualitatively higher level.

Keywords

Digital school; Primary schools; Teachers; Qualitative research.

I. Introduction

The most recent movements in the field of digitalization and digital transformation that are observed worldwide whether of a gradual (planned) or emergency (forced) nature, generously amplified by the spread of the new coronavirus (SARS-CoV-2), tend to be considered by researchers as a necessary condition for the renewal of educational environments (Volkov & Chikarova, 2021). In addition to providing excellent opportunities for reviewing school subjects, such movements also enhance the creation of more flexible school management systems, as well as the introduction of new practices, methods, and resources to support teaching and learning processes in different contexts of education and training (Bakhmat et al., 2020). Considering mass digitalization as a new reality in which the modern teacher is completely immersed, it is necessary to pay attention not only to the potential for renewal that is envisioned but also to the conditions required to assure the sustainability of the desired changes in education (Griban et al., 2019). Among the many challenges, recent research has highlighted the permanence of gaps in teacher preparedness and underlined the fragility of strategic leadership in schools to strengthen digitalization, preferably in conjunction with existing national strategies (Lindqvist & Pettersson, 2019).

Although teachers have always been at the heart of the concerns of the various national initiatives and efforts related to the digitalization and modernization of school contexts, developed over many years, to promote the acceptance and use of technologies in schools (Lindqvist & Pettersson, 2019), there are still few explicit discussions and conceptual clarifications about what digitalization is and what it involves in different school contexts (Pettersson, 2021). In this sense, knowledge of how teachers and other educational actors, with responsibility for the development and implementation of programs and actions framed in this area, understand and conceptualize digitalization at school has been configured as an additional requirement for the task of taking education to a qualitatively new level, benefiting from the infusion of new technologies in the school context in a conscious, intentional and collectively deliberate way.

Seeking to contribute to this goal, within the scope of this study, we face the phenomenon of digitalization in the school context as a process of transformation in several stages and at different levels of curricular decision (Roldão & Almeida, 2018). In that respect, although we recognize a diversity of relevant actors with responsibility in different fields of incidence of curricular management, our attention falls on the representations of teachers about what they think a digital school is (or could be). Therefore, with this study, we intend to grasp and describe the representations of primary school teachers about the phenomenon of digitalization at school. Methodologically, this is a qualitative study, specifically aligned with the phenomenological approach, as it presents a clear intention to investigate “what, in reality, makes sense and how it makes sense for the investigated subjects” (Amado, 2017, p.41). For our purposes, the empirical data collected has a qualitative nature and integrates the documental corpus recently constituted in the context of the ongoing activities within the Amadora Digital Observatory of the Escol@s Digital Project. This activity included listening to all primary teachers who work in public school establishments at the Amadora Municipality. It is, therefore, a partial study that composes a broader research and intervention project, the Escol@s Digital Project, started in 2021 with the aim of supporting digital transformation in all public primary schools of Amadora Municipality ¹.

¹ The Municipality of Amadora, currently consisting of six localities, is in the center-south of Portugal and is part of the Greater Lisbon region, where the capital of Portugal is also located. It is a heavily urbanized territory, home to around 1.7% of the national population (INE, 2022). In terms of education, the political action of the Municipality of Amadora is based on a humanist vision, aiming that all children and young people reach their potential in school life, regardless of their origin and abilities. Regarding the organization of the public compulsory education network (including preschool education), the municipality has 92 institutions organized into 12 Groupings of Schools (PORDATA, 2022a). Of this set of institutions, 29 are public primary schools, involving, in the 2021 school year, 5589 students and 418 primary teachers (PORDATA, 2022b; 2022c).

In addition to this introduction, which frames the study carried out, this article includes a literature review that focuses on identifying topics and analytical categories that stand out in the discussions and results of recent studies focused on the phenomenon of digitalization in schools. It is followed by a detailed description of the methodology used in this study, clarifying the processes and procedures for the analysis and collection of empirical data that support the analysis and discussion of the results that we will present below. Finally, in the conclusions, some key ideas of the work carried out are systematized, including the aspects that seem to be most relevant from a theoretical and practical point of view.

II. Literature review

Given the new logics of action and initiatives aimed at the generalization of the “digital school”, which are in a state of acceleration to respond to new and old concerns, triggered or intensified from the first quarter of 2020, after the start of the pandemic caused by SARS-CoV-2, we are called upon to (re)equitate the type of education we want for the future of our children. While this is not exactly an unprecedented call (UNESCO, 2016), important discussions and reflections on school, pedagogy, and the future of post-pandemic education emerge (Bettencourt, 2021; Figueiredo, 2021).

At the same time, we have at our disposal an already quite voluminous collection of balance sheets and various reports that accentuate the harmful effects of the so-called digital gap in access to education (Santos, 2021), observing, even in this instance, an equally accentuated recognition of the role of the State in protecting that principle and ensuring equal opportunities, creating technological solutions that do not further harm students who are already at a disadvantage (UNESCO, 2020; Santos, 2021; Sanz, Sáinz & Capilla, 2020). In addition to the call for the reinforcement or creation of measures that guarantee the conditions of connectivity and access to devices, resources and equipment, the school is also asked, in various ways, to commit to the intentional development of the digital skills of learners and those responsible for organizing learning processes, namely educators and teachers at all levels and areas of education (UNESCO, 2020; Santos, 2021). A commitment that, as Pettersson (2018a) notes, should consider the influence of broader contextual conditions in the school environment, requiring, for this reason, that researchers get involved in the development of new approaches that can improve teachers’ digital competence in a contextualized way, according to the concrete needs of each context.

In addition to these considerable challenges, there are several studies that show the decisive role of teacher preparation in laying the foundation for the transversal integration of digital in their professional and pedagogical practices, in school life, in their daily routines and procedures and, above all, in learning and in the lives of students (Afonso et al., 2022). Also highlighting the idea of a digital school by associating it with the image of a modern educational institution, with good computer equipment and good connectivity (Ređep et al., 2020), another part of the research developed around the digitalization phenomenon in a school context deepens the set of factors that condition the vision and practices of desired educational change and innovation. In this line of concerns, in addition to training and increasing the pedagogical and digital skills of future teachers and teachers already in service, it is important to bring forth the well-known challenges associated with the acceptance and use of digital technologies by teachers and students (Grönlund et al., 2017; Lindqvist, 2015), the maintenance of traditional teaching practices, making it difficult to use technologies at the service of meaningful learning (Denoél et al., 2017; Costa, 2019; Grönlund et al., 2017; Jahnke et al., 2017) and also various difficulties at the level of existing leadership in schools to support pedagogical, organizational or institutional change (Blau & Shamir-Inbal, 2017; Hauge, 2016; Kafyulilo et al., 2016; Pettersson, 2018a ; Lindqvist & Pettersson, 2019; Zong, 2017).

Despite the recent and in-depth discussion on the various facets that we have tried to systematize here, there are still few studies that start from a holistic conceptual model to describe, map and understand the complexity inherent to the digitalization and digital transformation of schools, standing out in this line of thought two recent studies developed by Haynes and Shelton (2018) and by Jeladze and Pata (2018). In the first case, and although the emphasis is on the decisive role of school leaders in building a sustainable path to promote the necessary changes for the digitalization and digital transformation of schools, we are led to recognize the gigantic dimension of the challenges that arise in this process and that, desirably, will have to be solved in an articulated and highly contextualized way. Specifically, and as suggested by the results obtained by Haynes and Shelton (2018), these are challenges that can be characterized, evaluated, and monitored around ten categories, namely: 1) Leadership; 2) Professional learning; 3) Resources and sources of resources; 4) Support systems; 5) Politics; 6) Technology implementation; 7) Learning environments; 8) Infrastructure; 9) Quality and evaluation; 10) Community Engagement.

Equally reinforcing the need for a holistic view of the digitalization processes underway in schools, but also a very focused orientation on the consolidation and sustainability of practices already underway, Jeladze and Pata (2018) develop a very robust and comprehensive conceptual model to map the processes of digital transformation, called the Smart, Digitally Enhanced Learning Ecosystem. This model, based on an ecological perspective, in addition to providing a solid basis for looking at the school as a complex and adaptable system in constant interaction and interdependence with the external environment, is also relevant for analyzing the evolution of digital maturity at schools (Ređep et al., 2020). Considering the results obtained in that study, the researchers suggest that the path towards the digitalization of schools should balance two sustainability intentions: stabilizing the current learning ecosystem with its current needs without, however, compromising the search and testing of new solutions and methodologies towards change.

Given the above, it is clear that the understanding associated with the phenomenon of digitalization of the school, imbued in the concept of digital school, cannot be limited to an approach based on technical rationality, materialized in specific actions aimed at sometimes improving infrastructures and sometimes the training of teachers and other professionals, implying, by force of reason, unity, and coherence that only a global and integrative vision will achieve. For this path, as suggested by the results of the reviewed studies, schools must support their efforts on the principle of including different players in the digital transformation; encourage the development, testing, and acceptance of digitally enhanced learning activities; strengthen internal networks for sharing and disseminating new practices; and develop procedures to provide learning feedback based on systematically collected data and information flows to manage and monitor changes (Jeladze & Pata, 2018). In addition to these aspects, which stress the need for strategic leadership for the desired transformational change, we are also confronted with the demand placed on the complexity of systems thinking, which implies not forgetting the permanent and dynamic interaction between macro and micro processes (Hauge, 2016), including the presence of regulations and policies of different scales and interests (Mausethagen, 2013; Ozga, 2019).

III. Methodology

In order to know and describe the representations of primary school teachers on the phenomenon of digitalization at school, we assumed an orientation aligned with the phenomenological approach (Loureiro, 2006; Silva & Gomes, 2020) and mobilized a corpus of qualitative data collected through the application of an online questionnaire to all primary school teachers of the public network of the Municipality of Amadora, specifically from the answers provided by the respondents to an open question, formulated in the following terms: What do you think a “digital school” could be?

Before data collection, access to schools was negotiated with the support of key contacts, previously indicated by the leaders of the schools that are part of the Escol@s Digitais project. These were responsible for sending the invitation, in June 2021, to all primary teachers to participate in this phase of the project by responding to an online questionnaire prepared by the researchers. Accompanying this request made to potential participants, a Free and Informed Consent Form was sent to clarify the study's aim and the terms that governed participation in it.

Regarding the profile of the participants (n=267 primary teachers), from the information we collected, it appears that 85% are female, and more than half are between 41 and 50 years old. Table 1 presents in more detail the socio-professional profile of the participants.

Variables	Categories	N	%
Gender	Female	229	85,8
	Male	38	14,2
Age	Between 26 and 30 years	4	1,5
	Between 31 and 40 years	65	24,3
	Between 41 and 50	138	51,7
	Over 51 years	60	22,5
Academic qualifications	Bachelor's degree	5	1,9
	Graduation degree	206	77,2
	Master's degree	45	16,9
	Doctoral degree	2	0,7
	Others (Post-Graduation/Specialization)	9	3,4
Recruitment group code	100 - Preschool Education	4	1,5
	110 - 1st Cycle of Basic Education	235	88,0
	120 - English for the 1st Cycle of Basic Education	12	4,5
	360 - Portuguese Sign Language	1	0,4
	910 - Special education	15	5,6

Table 1: Socio-professional characterization of the participants (n=267 teachers).
Source: Own elaboration based on the data obtained in the study.

Considering the central objective of the study and the nature of the empirical data, content analysis was chosen as the most appropriate technique to systematically and rigorously scrutinize the meanings that are manifested in the respondents' speeches regarding the theme under analysis, thus enabling the reconstruction of central ideas emerging in their responses (Mayring, 2000; Henkel, 2017). Once the analytical technique was defined, work began on building a database using Google Sheets which, in addition to facilitating the organization and management of data, also enabled the development of an analytical and interpretive process based on triangulation between researchers (Loureiro, 2006).

The analysis corpus consisted of 183 Registration Units (RUs), which correspond to textual fragments, present in the answers of the respondents. These RUs were analyzed inductively, based on a categorization system that enabled "a rigorous and objective representation of the contents or elements of the messages" (Amado, 2014, p. 304). The construction of the categorization system

relied on a progressive and continuous triangulation between the researchers (Loureiro, 2006) until we reached a degree of conceptualization considered relevant for the achievement of the intended objectives, assuming, as Maia and Fernandes (2001) explain, that the naming of categories can benefit both from the lexicon present in the textual material under analysis, and the theoretical sensitivity of the researchers involved. It was intended, by this means, to minimize possible coding divergences and, consequently, to increase the validity and reliability of the research (Sampaio & Lycarião, 2021).

The final coding, with peer validation in the various stages of the process, resulted in the identification of twelve categories emerging from the data, which were distributed across three analytical dimensions, as shown in Table 2.

Dimensions	Categories and examples of RUs
<p>Strategic dimension Analytical dimension that aggregates references that define what a "digital school" could be by alluding to a set of requirements that will be necessary to ensure the application of the potential that technologies theoretically incorporate</p>	<p>Technology infrastructures ("A school with the necessary equipment and resources", "A school with efficient digital resources and good internet.")</p> <p>Human Resources ("School with the necessary means and human resources motivated to use it.", "Be equipped with people trained in the area.")</p> <p>Teacher training ("Digital school could be an institution that provides [...] the necessary training", "Schools having met all the conditions... as trained teachers.")</p>
<p>Pedagogical dimension Analytical dimension that groups references that define what a "digital school" could be by alluding to the pedagogical potential of digital technologies, explaining what these resources allow to do, their advantages and gains concerning the various facets of work school.</p>	<p>Learning promotion ("A school where ICT is used in an interdisciplinary way, in favor of promoting learning", "(...) where usefulness and digital skills are privileged.")</p> <p>Diversification of teaching strategies ("A school that mobilizes digital technologies in an educational context", "(...) which is based on the use of digital tools in the implementation of pedagogical activities.")</p> <p>Motivation of learners ("A school based on technology, with reliable and more attractive resources for students", "I consider the Digital School to be an added value tool for..., motivation and school success.")</p> <p>Curriculum consolidation ("A digital school is an educational space where technologies are used in the transmission, acquisition and assimilation of contents.")</p> <p>Assessment of learning ("a school open to new technologies and in which digital resources are an important component in carrying out the assessment.")</p>
<p>Axiological dimension Analytical dimension that brings together references that define what a "digital school" could be by alluding to the principles that should</p>	<p>Inclusion ("A school for everyone and with everyone", "where all digital resources are available to everyone equally and without social, cultural and economic constraints", "promoting a more comprehensive and inclusive education.")</p>

to the principles that should guide the service provided by the school itself and the educational action itself.

Balance

“A school, no matter how much it uses technological/digital tools, should never neglect “traditional teaching”. “The use of technologies is necessary, but we must not neglect the importance of books, the sharing of each one in the use of technologies.”)

Cooperation

(“... where digital sharing is part of everyday life”, “Cooperative work.” “more sharing between everyone and not each colleague being in “their “room”.”)

Adaptability

(“A school that responds to the new teaching challenges”, “(...) follows the evolution that can be seen in society.”, “(...) follows the evolution of the times and uses it for the benefit of the students.”)

Table 2: Categorization System.
Source: Own elaboration based on the data obtained in the study.

Finally, regarding data processing, we chose to resort to descriptive statistics based on the quantification of the RUs, by counting absolute and relative frequencies and, thus, highlighting the existence, intensity, and relative importance of each of the categories for the understanding of the phenomenon under study (digitalization in schools), in the light of the perspective of the primary teachers.

III. Analysis and discussion of results

The results that are presented and discussed here refer to the three dimensions that stood out in the content analysis, configuring, within the scope of this study, the core of the representations of the primary teachers about digitalization in the school. Each of the dimensions, operationalized following the coding process described above, aggregates a set of RUs organized by categories, according to the distribution shown in Table 3.

Dimensions	Categories	N	%
Strategic Dimension	Technology infrastructures	89	48,6%
	Human Resources	7	3,8%
	Teacher training	3	1,6%
Subtotal (RUs)		99	54,1%
Pedagogical Dimension	Learning promotion	23	12,6%
	Diversification of teaching strategies	18	9,8%
	Motivation of learners	7	3,8%
	Curriculum consolidation	5	2,7%
	Assessment of learning	2	1,1%

		Subtotal (RUs)	55	30,1%
Axiological Dimension	Inclusion		11	6,0%
	Balance		6	3,3%
	Cooperation		6	3,3%
	Adaptability		6	3,3%
		Subtotal (RUs)	29	15,8%
		Total (RUs)	183	100,0%

Table 3: Distribution of Registration Units (RUs) by Analytical Categories.
Source: Own elaboration based on the data obtained in the study.

Starting from this global reading, we proceed with an analysis and discussion of the results obtained by analytical dimension, dialoguing, whenever possible and considered pertinent, with analysis of previous studies, naturally considering the literature review previously presented to support this work conceptually and methodologically.

a. Strategic dimension: requirements for digitalization in schools

Globally, it is in the Strategic Dimension that most of the analyzed RUs are concentrated (54,1%), indicating that teachers' representations, about what a "digital school" could be, tend to focus more on the shortcomings they identify in the digital area. Also, in our literature review, we highlight the understanding of digital school by referring to the requirements for digitalization in educational institutions, bringing attention here to the discussion around the digital technologies that can be used (Håkansson Lindqvist, 2015), digital competencies of teachers (Aesaert et al., 2015; Pettersson, 2018a) and the role of leaders in this transformation (Blau & Shamir-Inbal, 2017; Lindqvist & Pettersson, 2019; Pettersson, 2018b; Zong, 2017).

In this sense, as can be seen from the content of the references collected and analyzed in our study, the idea of what a digital school is or what it could appear to be closely linked to a set of requirements or conditions that, according to the thinking of teachers, it will be necessary to enable the application of the potentialities that the technologies theoretically incorporate. It should be noted that, among the three categories of requirements emerging from the results, "technology infrastructures" is where the highest percentage of RUs is recorded (48,6%), thus legitimizing all investments aimed at consolidating a digital school through programs and actions that make it possible to update equipment and infrastructure as, in fact, is foreseen in the Digitalization Program for Schools (Resolution of the Council of Ministers n. ° 30/2020, of April 21).

Still about the discourse of needs which, within the scope of this study, we conceptualize as the Strategic Dimension inherent in understanding the phenomenon of digitalization in schools, a set of references that point to the need to guarantee in schools the existence of "human resources" (3,8%) with training in the digital area and with the capacity to maintain not only the good maintenance of computer equipment, but also the necessary motivation to support the development of students' digital skills, in a classroom context, as it is also evidenced by the literature (Aesaert et al., 2015; Pettersson, 2018a). And, finally, with an even smaller expression in the analyzed corpus, there is a set of references that underline the need for "teacher training" in the digital area (1,6%) which, in contrast to the high number of studies that signal the need to look at training as an essential condition for the success of the digital transition (Blau, & Shamir-

Inbal, 2017), may already reflect the recognition of the effort that is being made at the national level within the scope of the Digital Training Plan of Teachers (DTPT²).

b. Pedagogical dimension: recognition of the potential of digital technologies

Although the results show a strong concern with equipment, digital resources, and access to “a good internet”, it is also worth noting the expressive number of references that substantiate the Pedagogical Dimension associated with the representation of what a digital school is or could be (30,1%). This study, in particular, indicates an explicit recognition, by teachers, of the gains and advantages of digital in schoolwork, very well documented and discussed in the reviewed literature (Agéllii Genlott & Grönlund, 2016; Glover et al., 2016; Jahnke et al., 2017).

From this recognition, as systematized in Table 3, stand out, in quantitative terms, references that emphasize the value that technologies can offer to two processes considered fundamental for the construction of knowledge in the school context – learning and teaching. In fact, and in line with the most recent curriculum guidelines for the level of education at which we are situated, a particular set of references alludes to the “learning promotion” (12,6%) and the “diversification of teaching strategies” (9,8%) which, on the other hand, contrasts with the low frequency of RUs related to the recognition of the pedagogical potential of technologies for the “assessment of learning” (1,1%).

c. Axiological dimension: reinforcement of values considered fundamental

Last but not least, to understand the representations of teachers about what a digital school is or could be and, in this way, contribute to broadening the debate about the phenomenon of digitalization in schools, is observed in the results of this study, a third group of references that, taking a more critical look at the potential of the digital, highlight four categories of values and principles by which any school, more or less digital, should guide its action: “inclusion”, with 6,0% of references analyzed, followed by the same percentage (3,3%), the categories “cooperation”, “balance” and “adaptability”.

This set of categories, in addition to illustrating the emergence of new concerns from the point of view of instruction itself, is also expressed in the Profile of Students Leaving Compulsory Schooling (Martins et al., 2017) – a reference curricular document for the organization of the entire educational system and the work of schools – introduce here a background dimension that, although little reflected in the reviewed scientific production, mirrors a fundamental change in the way in which the role of the digital in the global development of people is equated, not limited to use with strictly academic benefits, it establishes and reinforces a set of values considered fundamental for sustainable growth and peaceful coexistence (UNESCO, 2017).

IV. Conclusions

The study presented here sought to characterize and describe the understanding of what a digital school is or could be, in the light of the thinking of primary teachers, discussing the results obtained in conjunction with the results of recent studies and other elements and requirements that are reflected in reference documents and current curriculum references. In addition to the connections that were established between the collected evidence and certain emerging analytical categories in the reviewed literature, the pertinence of this study for the theoretical development

² More detailed information on the nature, objectives, and operationalization strategies of the Digital Training Plan of Teachers (DTPT) is available online, on the official website of the Directorate-General for Education, at <https://www.dge.mec.pt/pcdd/pcdd.html>.

of the subject in question is anchored in the development of a robust system of categories, formed by 12 analytical categories that, in coherence with the phenomenological approach adopted, offer an organized description of the structure of the phenomenon under study, exposing the peculiarities inherent in the idea of a digital school, considering and valuing the subjectivity present in the discursive practices of the subjects surveyed (Loureiro, 2006; Silva & Gomes, 2020).

Those 12 categories, as presented and interpreted by the researchers, embodied a conceptual model formed by three dimensions that corroborate the complex and multifaceted nature of the process of digitalization and digital transformation of schools, emphasizing, in this case, the strategic, pedagogical, and axiological components. Thus, in this study, an idea of a digital school, in a certain sense, expands the notion of an educational institution with a high level of digital technologies (Ređep et al., 2020), highlighting not only the need for a systematized approach of using these resources in the teaching and learning processes but also a set of principles that emphasize the need to raise education to a qualitatively higher level.

Also considering the longitudinal nature of the project, the model of analysis resulting from this study will be put to the test at the end of the planned activities, namely in the final evaluation of the effects and project results. For this final evaluation, it is expected that data from several sources will be triangulated, including interviews with the teachers and students involved. With this evidence, we will certainly be able to develop a more substantive model of analysis of digital school representations and to compare possible differences and similarities between primary school teachers and students. Still prospecting the deepening of this line of research, it would be interesting, shortly, to use the same categories to investigate what teachers and students of other levels of education think about the subject under study in this paper.

In addition to theoretical contributions, the study adds elements of interest to school leaders and other agents who are involved in the development and implementation of strategies and interventions aimed at advancing digitalization and digital transformation in schools. From a practical point of view, this work will provide a very concrete vision of the initial representations of the teachers that integrate the Escol@s Digitais Project, providing a basis for reflection sustained by evidence to make informed and collectively deliberate decisions to respond to the challenge digitalization and digital transformation of the primary schools in the Municipality of Amadora.

Despite everything, it is important to recognize the limitations associated with the attempt to objectively understand any educational phenomenon, thus assuming an inevitably partial and very restricted reading, naturally marked by the very ability of researchers to make knowledge progress from phenomenological thinking (Loureiro, 2006; Silva & Gomes, 2020).

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Comprendre el significat d'una escola digital des de la perspectiva dels docents de Primària

Resum

El Projecte Escol@s Digitais, en desenvolupament a totes les escoles primàries públiques del municipi d'Amadora (Portugal), té com a objectiu donar suport al procés de transformació digital en la dinàmica escolar. En aquest article examinem els significats que els mestres que participen en aquest projecte atribueixen al concepte "escola digital". Per això, mobilitzem un corpus de dades qualitatives obtingudes a través d'un qüestionari en línia que incloïa una pregunta oberta, formulada en els termes següents: "Què creus que podria ser una escola digital?" L'anàlisi realitzada, amb validació per parells, va destacar tres dimensions que ajuden a comprendre el concepte d'escola digital de manera holística: la primera dimensió subratlla els requisits elementals per assegurar el procés de digitalització a les escoles (dimensió estratègica); la segona dimensió destaca el potencial pedagògic de les eines digitals (dimensió pedagògica); i la tercera dimensió emfatitza un conjunt de valors i principis pels quals tota escola, més o menys digital, ha de guiar-ne l'actuació (dimensió axiològica). En conjunt amb els resultats d'estudis recents, conclou que el procés de transformació digital en curs, tot i ser complex i multifacètic, és necessari per elevar l'educació a un nivell qualitativament superior.

Paraules clau

Escola digital; Escoles primàries; Mestres; Investigació qualitativa

Comprender el significado de una escuela digital desde la perspectiva de los docentes de Primaria

Resumen

El Proyecto Escol@s Digitais, en desarrollo en todas las escuelas primarias públicas del municipio de Amadora (Portugal), tiene como objetivo apoyar el proceso de transformación digital en la dinámica escolar. En este artículo examinamos los significados que los maestros que participan en este proyecto atribuyen al concepto de "escuela digital". Para ello, movilizamos un corpus de datos cualitativos obtenidos a través de un cuestionario en línea que incluía una pregunta abierta, formulada en los siguientes términos: "¿Qué crees que podría ser una `escuela digital`?" El análisis realizado, con validación por pares, destacó tres dimensiones que ayudan a comprender el concepto de "escuela digital" de manera holística: la primera dimensión subraya los requisitos elementales para asegurar el proceso de digitalización en las escuelas (dimensión estratégica); la segunda dimensión destaca el potencial pedagógico de las herramientas digitales (dimensión pedagógica); y la tercera dimensión enfatiza un conjunto de valores y principios por los que toda escuela, más o menos digital, debe guiar su actuación (dimensión axiológica). En conjunto con los resultados de estudios recientes, se concluye que el proceso de transformación digital en curso, a pesar de ser complejo y multifacético, es necesario para elevar la educación a un nivel cualitativamente superior.

Palabras clave

Escuela digital; Escuelas primarias; Maestros; Investigación cualitativa.

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