

Article

Knowledge Management and the Political–Pedagogical Project in Brazilian Schools

Andréia de Cássia Gonçalves Costa ¹, Cristiane Resquiti Paulino Strozzi ¹, Letícia Fleig Dal Forno ²,
Rejane Sartori ² , Radu Godina ³  and Florinda Matos ^{4,*} 

¹ Programa de Pós-Graduação em Gestão do Conhecimento (PPGGCO), Cesumar University (UNICESUMAR), Maringá 87050-900, Brazil; andreiacassiacosta@gmail.com (A.d.C.G.C.); diretoria@escolacriarte.com.br (C.R.P.S.)

² Cesumar Institute of Science, Technology and Innovation (CISTI), Cesumar University (UNICESUMAR), Maringá 87050-900, Brazil; leticia.forno@unicesumar.edu.br (L.F.D.F.); rejane.sartori@unicesumar.edu.br (R.S.)

³ Research and Development Unit in Mechanical and Industrial Engineering (UNIDEMI), Department of Mechanical and Industrial Engineering, NOVA School of Science and Technology, Universidade NOVA de Lisboa, 2829-516 Caparica, Portugal; r.godina@fct.unl.pt

⁴ Centre for Socioeconomic and Territorial Studies (DINÂMIA'CET-ISCTE), Instituto Universitário de Lisboa (ISCTE-IUL), 1649-026 Lisboa, Portugal

* Correspondence: florinda.matos@iscte-iul.pt

Abstract: Knowledge Management as a strategy to improve the quality of the institutional environment can be related to the coordination of activities that create, store and share knowledge. School Management has to deal with different tasks, such as planning, organization, leadership, guidance, monitoring and evaluation of all the processes necessary to ensure the promotion of students' learning and training. In this context, the Political–Pedagogical Project assists School Management, since it is an important document for the school organization, containing the school's identity as well as the plan to achieve the best teaching and learning process for the school community. In this sense, the objective of this research was to demonstrate how the Political–Pedagogical Project can promote Knowledge Management at the school level. The methodology used was exploratory and bibliographic research. The results obtained in this paper show that the Political–Pedagogical Project strengthens School Management when it is supported by Knowledge Management, considering that there is an improvement in the promotion of the quality of the organizational environment, as well as the elucidation of effective learning for teachers and students through democratic management.

Keywords: knowledge management; school management; political–pedagogical project



Citation: Gonçalves Costa, A.d.C.; Strozzi, C.R.P.; Forno, L.F.D.; Sartori, R.; Godina, R.; Matos, F. Knowledge Management and the Political–Pedagogical Project in Brazilian Schools. *Sustainability* **2021**, *13*, 2941. <https://doi.org/10.3390/su13052941>

Academic Editor: Marc Alier

Received: 27 January 2021

Accepted: 3 March 2021

Published: 8 March 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

As a result of the growing pressures that the educational sector has been experiencing, researchers have increased their attention on Knowledge Management's potential in education, since it can be used to improve learning and research processes [1,2]. In schools, Knowledge Management gains even more importance, as schools create the conditions for an environment where intellectual property is present and palpable within the faculty [3]. Whether in elementary, secondary or higher education, the school space is always formed by knowledge agents that complement each other. Communication must flow freely and all the involved agents have to be part of the same collaborative process, of experience exchange and knowledge [4–6].

This study is based on the assumption of bringing closer theories of Knowledge Management in the context of education, analyzing the appropriate approaches in educational organizations, which here will be specifically addressed as schools. It is focused on an association through the approach of taxonomy as a resource that causes the systematization of information for decision-making in organizations. In this regard, the taxonomy in the

analysis and study of the Political–Pedagogical Project was highlighted as a systematization instrument of the function, the organization and the school’s performance.

Thus, the objective of this exploratory study, based on bibliographic research, is to demonstrate how the Political–Pedagogical Project can promote Knowledge Management in schools.

The literature search was carried out in the databases of the Scientific Electronic Library Online (SciELO) of the Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES) and the Brazilian Digital Library of Theses and Dissertations (BDTD) of the Brazilian Institute of Information Science and Technology (IBICT), following the idea of selecting national productions about the Political–Pedagogical Project and School Management and national and international productions on Taxonomy and Knowledge Management. The purpose of a reference’s analysis only of a national contribution on the Political–Pedagogical Project and School Management was due to the fact that this research is based on the Brazilian reality of teaching and includes considerations on the project’s guiding documents, regarding the Brazilian school organization model and the description and understanding of School Management. The international perspective on Taxonomy and Knowledge Management reported the analysis of theoretical and conceptual descriptions that helped in the understanding and definition of how these two concepts can be associated and identified in Brazilian schools and the processes of structuring school dynamics.

As a result, this paper is structured as follows: in addition to this introductory section, the second and third sections present the conceptual foundations of Knowledge Management and School Management, respectively. In the fourth section, an analysis of Knowledge Management in the context of education is presented, analyzing the appropriate approaches in educational organizations and highlighting the Political–Pedagogical Project in the promotion of Knowledge Management in schools. The last section contains the conclusions of this study, followed by the references used.

2. Knowledge and Knowledge Management

Knowledge is the process and the result of the relationship between the individual who knows and the known object. According to a study in [7], the origin of knowledge is through information, which is a set of relevant data in the formation of its meaning. Data and information can easily be stored on computers, unlike knowledge, which is something personal and complex.

When considering knowledge as the reasoning ability, operated through interpretation, analysis and understanding of the data and information, it is understandable that knowledge exists for problem-solving, decision-making, learning and teaching [7]. Associated with Knowledge and Information Management, knowledge can be structured. This structuring may have repercussions on the generation of a meaning, so that decision-making and knowledge construction can exist [7].

Therefore, it can be understood that the construction of knowledge becomes concrete from the moment that tacit knowledge and explicit knowledge are associated [7,8]. For [9], the creation of knowledge can occur with socialization, and it can go through three other phases. This perception caused the development of a knowledge conversion spiral. The conversion modes are socialization, where tacit knowledge is shared and created through direct experiences; externalization, which is the association of tacit knowledge through dialogue and reflection; combination, which refers to systematizing and applying explicit knowledge and information; and internalization, which is related to learning and acquiring new tacit knowledge in practice [10,11].

New knowledge always begins with individuals, since the organization cannot build knowledge on its own [9]. The organization needs to provide moments for the individuals to be able to exchange personal knowledge with each other, in order to be shared within the organization [9]. In the knowledge spiral, the socialization phase consists of the act of sharing tacit knowledge with explicit knowledge; that is, the moment when experienced

practices are exchanged [12]. This moment can be considered as the sharing of concepts, experiences, decision-making or possibilities for solving problems [8].

It is understandable, then, that the knowledge conversion modes, such as socialization, externalization, and combination, allow experiments that are internalized by individuals and that originate a new knowledge—internalization. This cycle and its processes have an impact on Knowledge Management. Thus, it is evident that knowledge is an intangible asset directly linked to human activity, and as one of the main productive resources today, managing it must be a priority action in companies of different segments and dimensions [8,13]. The area that studies the management of this resource is Knowledge Management.

Understanding the concepts and characteristics of Knowledge Management is fundamental to launching strategies that guarantee the success of the organization as a whole, whether it is a business or an educational organization [5,14–16]. In this sense, Table 1 presents a systematization of the definitions of Knowledge Management found in the scientific literature.

Table 1. Knowledge Management definitions.

Reference	Definition
[17]	“It is a conceptual framework that encompasses all activities and perspectives necessary to obtain an overview of dealing with and benefiting from the corporation’s knowledge assets and their conditions. It points out and prioritises the areas of knowledge that require management’s attention. It identifies outstanding alternatives, suggests methods for managing them, and carries out the activities necessary to achieve the desired results.”
[18]	“A company’s ability to create new knowledge, disseminate it throughout the organisation as a whole and incorporate it into products, services and systems.”
[19]	“It is like a newly discovered ocean, which is not yet on the map, and only a few people understand its dimensions, or walk the path to reach it. It links individual knowledge to the formation of organisational knowledge, which is also represented by different capacities, and may, in organisations, share or not share strategic decisions, which should be an essential or important part of the business strategy.”
[20]	“It is the systematic process of searching, organising, filtering and presenting information in order to improve the understanding of people in a specific area of interest.”
[21]	“It is the management of activities and processes that promote organisational knowledge to increase competitiveness through better use and the creation of individual and collective knowledge sources.”
[7]	“It involves the ability of knowledge to add value to the organisation. With this, the organisation that is able to efficiently integrate the meaning processes, the construction of knowledge and decision-making can be considered a knowledge organisation.”
[22]	“A continuous and deliberate series of strategies, practices, techniques, formal and informal processes, used in organisations to identify, create, represent, process, analyse, store and distribute knowledge.”
[23]	“Deliberate and systematic coordination of people, technology, processes and the structure of an organisation, in order to add value through the reuse of knowledge and innovation. This coordination is achieved through the creation, sharing and application of knowledge, as well as the preservation of corporate memory through the storage and retrieval of valuable lessons learned and best practices, in order to promote continuous organisational learning.”

Despite the existence of more than 100 definitions of Knowledge Management, [23] reports that there is a common point among so many definitions: it is “a dynamic, guided through cycles, in order to capture (create, recover), share (disseminate) and apply (use) knowledge to add and generate value in the organisation” [24].

We recognize Knowledge Management as responsible for facilitating information management, developing and disseminating knowledge [8]. To this end, several knowledge management tools and practices can assist organizations in the process of creating, sharing, and applying knowledge. These tools and practices effectively contribute to an adequate management of organizational knowledge [25].

In the context of a school organization, as in any other business sector, knowledge resides in people, and it is explained in the processes [8]. Thus, for that organization to be successful, it is necessary to overcome the barriers that prevent the access and registration of information. In this regard, in [26] it is advised that the knowledge of a school organization should be created, organized, updated and disseminated systematically, hence enabling better school management. Those contributions of the Knowledge Management with the classroom space and the educational context are evidenced, mainly, when School Management and the Political–Pedagogical Project are analyzed.

3. School Management

The concept of School Management emerged in the 1930s and is linked to the understanding of the school as a work organization based on school administration, having as a pioneer Escola Nova, for instance, in Brazil [27]. Studies on School Management tend to bring the school closer to business organizations and have continuously been marked by a bureaucratic and functionalist conception [28–30].

In the 1980s, when the reform of pedagogy was instituted, it was necessary to begin demanding a critical focus of the school on society [31]. The theory of administration, which first named this work as school administration, was focused on a technocratic and functionalist approach, whereas the concept of School Management has in its essence a political and pedagogical concern [32].

With the changes in terminology and definition, it became clear that a school is a space that promotes learning how to learn, which repositions the value of education and qualifies the professional for the labor market [33]. Within this context, it is possible to observe two conceptions of organization and management of schools: one with a scientific-rational approach and another with a socio-political nature. These conceptions, in the scientific-rational approach, perceive a school within a neutral reality, which through planned and organized activities can reach high levels of effectiveness and efficiency. Those schools value structures based on organization charts, hierarchical functions and a low degree of participation by the people who work in the organization [34].

The socio-political approach, on the other hand, does not recognize the school as a neutral element, but as the result of a social construction made by students, parents and guardians, teachers and the community in general [35]. In this approach, the relevance of social interactions and the intentionality of the socio-political context are recognized. Thus, the concepts of School Management, therefore, reproduce political positions and conceptions of man and society [35].

In this way, School Management is the set of rules, guidelines and organizational structure that ensures the foundation of the use of material, financial and intellectual resources. It aims to coordinate and monitor the work of people, to ensure the optimal functioning of the school and activities in the classroom, guaranteeing better learning opportunities for all students [36].

In a different study [37], School Management encompasses not only access, but the practice of subjects' participation within the school. The involvement of teachers and the entire school community in decision-making and the functioning of the school ensures a higher quality of education. Therefore, School Management must be based on democratic principles to produce the necessary and significant changes in the organizational environment [38].

An educational organization as a whole requires a continuous articulation between the way of thinking and the way of doing educational work. School Management is responsible for planning and organizing, leading and guiding, monitoring and evaluating all the processes necessary to ensure the promotion of students' learning and training [39].

School Management is a means and not an end; this is because its ultimate goal must always be the meaningful and effective learning of students. The school must fulfil its role by developing skills that help students to think critically, analyze information in a contextualized way, express themselves clearly, employ problem-solving techniques

and develop the students' ability to make decisions and solve conflicts. It is clear that schools have a relationship and are associated with Knowledge Management [40], being a way of promoting improvements in the activities and strategies to be implemented in an organization [41].

4. Knowledge Management and School Management

Although the term Knowledge Management is little known in school organizations [41] or related to the school context in the Brazilian territory, it is present in planning meetings, joint research and many other activities that enable knowledge sharing.

The school space as an organization to educate citizens must be a learning organization in which intellectual capital, which is at the center of skills development, must be the reason and justification for valuing knowledge sharing. This evidences the conception that the teacher has the function of socializing and sharing his knowledge to seek the development of new skills, for himself and students [40]. This search movement turns schools into learning organizations.

It has to be recognized that human capital needs to be valued in the school community, since it tends to highlight the role of the teacher and its significance in intervening in the school and in the teaching and learning process [14]. It is understood, therefore, that the school is an organization that aims to socialize and share necessary knowledge for the education of students. It is necessary to create environments for interaction so that the teaching and learning process will have relevance for all who attend it [42]. In this thinking, concepts from business environments can be used to assimilate educational knowledge.

It is understood that in modern countries, knowledge and the ability to process and select information are raw materials for modern economies [43]. In the Brazilian context, it is identified that the action of sharing information and processes in the educational context provides Democratic Management, as it enables joint action by the actors, organizing the school as a social space [44]. Thus, we observe that the school organization must be seen as a space that involves the knowledge of the actors of this place, such as teachers, coordinators, principals, students, and those responsible for the entire community [45]. In addition, this knowledge should be used as a means of improving the community and the social context of the organization.

Knowledge in the school organization can be tacit, explicit in [7]. Tacit knowledge is everything that is included in individual experiences; explicit knowledge is what is registered in the rules, routines and procedures of the school space; and cultural knowledge is related with the norms, beliefs and assumptions used to value new information [7]. How to find, systematize and store this knowledge is one of the significant challenges that can be analyzed from the perspective of School Management considering the perspective of Knowledge Management.

Educational knowledge manifests itself through the relationship of the teacher who, when connected to the classroom, communicates uninterruptedly in a specific language with students. The teacher's purpose is to transform information into knowledge [46]. However, the construction of knowledge needs to go beyond traditional educational practices in the classroom. This is because the knowledge built in the teacher-student relationship, with the sharing and socialization of knowledge, comes from an exchange process [47]. The teaching and learning process develops in the classroom through the relationship between teacher and student. In this sense, knowledge production comes to be understood as the great intentionality of school learning [40,48].

The classroom is recognized as a favorable space for the construction of knowledge and the promotion of the cycle that comprises the processes of socialization, externalization, combination and internalization [18]. The classroom must be recognized and understood as a space that promotes the construction of knowledge [49–51], and also Knowledge Management and Learning Management. This is because it is in the school space that the predominance of the tacit dimension of knowledge is evident, which requires an effective socialization process. In the classroom, the construction of knowledge demands

the teacher to be a mediator, so that when socializing during the teaching and learning processes, knowledge construction takes place [40]. This will require the relationship between the teacher and a student to contribute to the exchange process, through dialogues, the interaction between both and socialization and sharing of the knowledge of the two.

4.1. Knowledge Management and Educational Actions

Brazilian school education reports on the right of access to the school system for all and recognizes that training processes must relate to human coexistence, work, teaching and research institutions, social movements and civil society organizations and cultural events; that is, its objectives must promote the formation of a citizen.

Knowledge Management allows teachers in schools to develop a set of policies and practices that improve teaching and learning [52]. It also strengthens the professional competence of people in the environment and improves the organization's structure and policy. Therefore, the implementation of Knowledge Management can help a school organization to develop better.

For teachers, Knowledge Management can meet the need for training that gives them pedagogical competence capable of reflecting on students' learning. In [43] a model is presented that facilitates the structural organization of educational institutions and is systematized in five dimensions. This is called the Mediative Knowledge Management Model for Educational Actions, as can be observed in Table 2.

Table 2. Knowledge Management definitions (adapted from [43]).

Dimensions	Knowledge Management Indicators	Mediation Actions
Organizational culture	Understanding of network relationships that provide the design of an environment for the creation and socialization of knowledge.	Develop an environment conducive to socialization and the creation of knowledge, through awareness and incentive actions.
Structural and technological aspects	Knowledge of the structural aspect of the organization and the technological resources of information and communication.	Use technological resources to communicate. Modernize the educational environment and structure. Consciously use technologies for educational purposes.
Motivational aspects of knowledge production and learning	Identification and development of methods to enhance the creation of knowledge in the organization.	Enhance the competitive role of knowledge as an organizational product in a healthy and educational way; valuing acquired and socialized knowledge; provide innovative and creative situations of knowledge construction to use it with a view to achieving organizational goals; encourage the search for and application of knowledge in the educational environment and society.
Production of new knowledge as a product	Development of methods and techniques for the knowledge generated to be organized and disseminated.	Identify, organize, disseminate and assist the use and creation of new knowledge based on Knowledge Management actions, techniques and methods.
Measurement and evaluation of explicit knowledge	Innovative and creative situations of knowledge construction must be measured and evaluated continuously so that the cycle of innovations and creations recreates new knowledge as a product.	Develop and apply methods and processes for evaluating actions aimed at creating knowledge. Develop reframing and effectiveness actions for these actions with the participation of all educational actors.

The five dimensions presented in [43] work to enhance educational activities, considering the manager as the person responsible for monitoring actions focused on culture, for structural, motivational aspects, and even for the production of new actions and the measurement of these.

Knowledge Management presents an intervention proposal that reinforces the need for a more appropriate dynamic organization between people, processes and technologies [3]. It denotes a relationship between sectors, areas and also resources and actions that are increasingly congruent with the characteristics of the organization. The school as an organization needs a systematization of knowledge and information, since it is a “fertile” field of scientific production. Interpersonal relationships and the production of intellectual capital must be protected and encouraged in the processes of creation and dissemination to improve the organizational climate further [52].

Schools have used, in their pedagogical practices, the knowledge of the teachers, through the socialization of knowledge, and in this way, the knowledge of these education professionals can remain in the institution indefinitely. Knowledge Management is not going to make the organization able to create knowledge immediately, but rather enable the management of the knowledge creation process [23]. Therefore, there is evidence in the Political–Pedagogical Project to contribute to the organization, systematization and functioning of the school.

4.2. *The Political–Pedagogical Project and School Organisation*

Brazilian school education refers to the right of access to the school system for all, and recognizes that the training processes that need to develop must relate to human coexistence, work, teaching and research institutions, social movements, civil society organizations and cultural manifestations, with its objectives being, in the end, to promote the formation of a citizen. In Brazil, The National Education Guidelines and Bases Law (LDB) (1996) [53] determined that Brazilian schools must prepare a document called the Political–Pedagogical Project, based on the participation of education professionals and those responsible for students, as well as members of the school community. This document guides the school on administrative and pedagogical issues with a view to democratic management of teaching [54]. One of the most significant gains that the Political–Pedagogical Project brings is the possibility of analyzing the school reality recognizing the identity of the school and its pedagogical practices.

This project is a document and tool that organizes and promotes the objectives, guidelines and actions of the educational process to be developed in the school, expressing the legal requirements of the educational system. In addition, it presents the elements that are the basis for all pedagogical, administrative and financial actions of the school [55]. It is corroborated, therefore, that the practice of building a Political–Pedagogical Project must be supported by theoretical conceptions and supposes the improvement and training of its agents.

The Political–Pedagogical Project presents itself as a theoretical-methodological framework for the creation of school autonomy, which, through reflective and continuous work, will form its own identity [56]. In order to become an instrument for reflection on pedagogical practices, it must be evaluated by teachers and members of the pedagogical teams in order to think together of new ways of organizing pedagogical activities to overcome fragmentation and division of labor.

The action of building a Political–Pedagogical Project with interventions by the school management reinforces Democratic Management, requiring an organization of principles, values, objectives and goals, which permeate the school’s functionality [57]. The authenticity of a project of this nature is closely associated with the degree and type of participation of everyone involved in the educational process. What was noted in the considerations of this study is that the school needs to present a functional organization in order to promote an adequate dynamic for knowledge sharing.

For a better understanding regarding the organization of a Political–Pedagogical Project, Figure 1 presents a conceptual map elaborated from a taxonomy. This map can assist in understanding the information on the elaboration of this project from the situational, conceptual and operational frameworks.

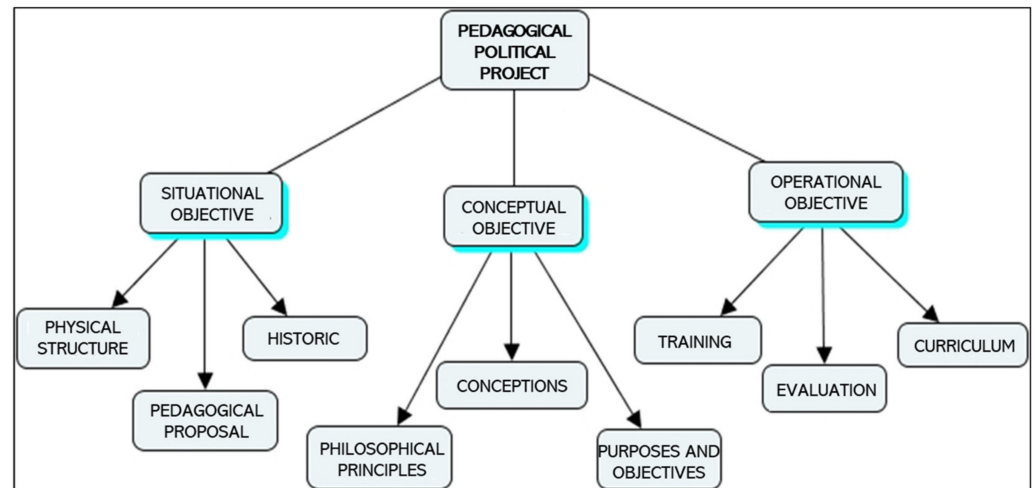


Figure 1. Conceptual map of terms by categories and subcategories. Source: own elaboration.

In the situational objective category, the information necessary to understand the schools' reality in relation to the physical structure, pedagogical proposal and school history is considered. The Political–Pedagogical Project must contain the transformations that accompany Brazilian society and, particularly, the intensification of the urbanization process, which has led to an increase in the demand for schooling and, consequently, to the expansion of the education networks. At the same time, schools were restructured due to the need to fulfil new tasks, differentiating not only the work of the teacher, but also creating and absorbing new functions [44,58].

The task that arises at the moment in relation to the organization and structuring of the school space is to recover the pedagogical process in its entirety. It is up to schools to provide training compatible with the requirements arising from the needs that are currently faced. This is a necessary condition to meet the profile of a student who has a range of information, which to a large extent is presented in a superficial, naturalized way, without the corresponding wisdom of the relationship, integration and organization. The school needs to be attentive to the present discussions regarding the Knowledge Society, and what is required both in the labor market and in the formation of a socially active citizen. According to [40], schools must know how to promote understanding and knowledge sharing actions, and must know how to teach their students to how to socialize and share knowledge, as well as how to differentiate data, information and knowledge concerning their learning process.

It is now recognized that generating a routine in school organizations that encourages collaborative learning among teachers, students and pedagogical staff is necessary [40]. This dynamic of collaboration evidences that more social and cooperative approaches are being worked on for the teaching and learning process [59].

It is emphasized that the situational framework of the Political–Pedagogical Project is a relevant point for understanding the general context of society, which is interspersed with economic issues, since it is the understanding of the society in which Man is inserted that will enable him to take action for the transformation of this reality. This will only be transformed through the action and placement of knowledge in favor of managing relationships.

In the conceptual objective category, philosophical principles, ends, objectives, and conceptions must be classified. Regarding the philosophical principles, these are the school's mission, vision and values. The ends and objectives include scientific knowl-

edge, cultural plurality, and Democratic Management. Finally, the concepts of Education, Childhood, World and Man are grouped.

The conceptual framework allows the relationship between the school's information and the theoretical concepts that guide educational practices to be established. One can only contribute to a more just, less exclusive society, building a project committed to the student [48]. Therefore, the commitment is to promote and disseminate knowledge, culture, the integral formation of responsible citizens, integrating elements of social life with the contents worked on. Once again, the relevance of considering social relations is noted, and part of the strategy to promote such a concept is in the proposal that will be associated with the school.

Both [40,48,59] emphasize that schools need to understand the profile of relationships that is being demanded in the job market, and thus provide students with experiences that allow them to act with mastery and skills, as students should be perceived as citizens who must be transforming agents of society, in addition to being critical, responsible and participating [46]. The school must be critical, reflective and enable the whole community to have a Political–Pedagogical Project consolidated by mutual collaboration and the exercise of collective construction, triggering innovative experiences that are happening in the school. Hence the importance of the definitions of the concepts of Education, Childhood, World and Man.

Finally, the operational objective category is made up of the subcategories “training”, “curriculum” and “evaluation”. This milestone consists of the directions taken to monitor and guarantee the process of development of teaching and learning. The training subcategory should include actions, technology, affectivity and inclusion. In the assessment, the terms learning, class council and recovery, and in the curriculum, planning. The planning must contemplate the possibility of an action–reflection–action movement in the constant search for a productive teaching and learning process. Pedagogical work does present not only the process of knowledge transmission, but also the elaboration and contextualization of knowledge.

Therefore, when addressing a given subject, all dimensions must be explored: the historical, the social, the economic, the spiritual, the political, the scientific; in short, all the dimensions that the topic might include. In [40,48] it is stated that planning is one of the ways of storing the memory of practices carried out at school, and it is the recording of teachers' mental maps from the lived experience of their classroom practice. Moreover, for the construction of this planning, it is observed that the discussions and the relations that are established during its elaboration are the record of the tacit knowledge developed by the teacher.

The guarantee of the learning process must be guided by the Political–Pedagogical Project, which is considered the most important document of a school organization and is also where the school's identity is stated, as it is a tool that externalizes the planning descriptions to reach the largest number of students with the best teaching and learning processes, still being linked to responsible political action in forming a type of citizen for a given society. For this to be effective, the Political–Pedagogical Project needs to be thought and elaborated collectively and made available for easy access.

With the help of Knowledge Management, this document can be created more efficiently through practices and tools that help in the recovery and organization of information, increasing the generation of useful, actionable and meaningful information. This process will significantly increase individual and team learning.

Thus, according to [60], Knowledge Management, which encompasses a set of principles, concepts, processes, practices and tools, includes guiding resources to facilitate and further improve School Management. Through better treatment and use of knowledge, the teaching–learning process should lead to progress, even in organizational relationships. As stated in [23], Knowledge Management is a system that creates routines for knowledge to be shared between people at different levels and environments. When this consideration is associated with the principles of School Management, the Political–Pedagogical Project

becomes the mediator for the promotion of Knowledge Management at school. This is because it ends up making explicit the elements that the school wants to emphasize regarding democracy, relations and the socialization of knowledge in the school space.

The school scenario tends to report challenges that have been present for more than 30 years in the education and systematization of the Brazilian school, and one of the problematized variables is the description and function of the Political-Pedagogical Project [61]. From the definition of a school legislation for education in the purpose and democratic perspective, it becomes evident in the literature how much the school community needs to be assisted and heard in relation to their needs, as well as to relate the actions promoted in the school as enabling social transformation. However, studies in the field of school management still confront theory with practice when research is applied that questions in the school how the stakeholders are engaged and involved in the production, organization and implementation of the Pedagogical Political Project [62]. Effective participation should be from the recognition of the school structure (physical part) to educational processes (methodology, learning theories and pedagogical practices in the classroom), but what is recognized is a course of actions promoted specifically by a group of students, professionals focused on school administration and management, and little participation by teachers, students and the community (parents and civil society). There is no structured and normalized cultural action on the importance of an individual Pedagogical Political Project, which reports the reality of the school, information is still mixed between schools, definitions and theories are reused. School management could be recognized as a strategy to disseminate practices such as sharing and socializing information and knowledge between sectors, as well as promoting a more accessible and inclusive school process if it were mapped and organized in the perspective of knowledge management [63], according to analysis of the taxonomy of the Pedagogical Political Project presented in the article.

The Pedagogical Political Project associates the relationship between student and community, school and community, and society and education, and when added to the objectives of knowledge management, the importance of school management that promotes democratic management with actions involving people, processes and technologies. Knowledge management in the school space and in school education broadens the objectives of relating school education to the labor market, innovation with educational resources, management with the school organization process, and the Pedagogical Political Project with the purpose of a document guiding the actions and objectives of each school [64] to promote functional training processes for a citizen.

5. Conclusions

Based on the objective that guided this study, it was possible to highlight the need for the Political–Pedagogical Project to strengthen School Management supported by Knowledge Management in order to achieve an improvement in the promotion of the quality of the organizational environment as well as the elucidation of effective learning for teachers and students through democratic management.

Through organizational practices and processes, Knowledge Management contributes to the effective sharing of knowledge, providing improvements in the quality of teaching throughout the school space. It is understood that the purpose of Knowledge Management in the school environment is to advance the quality of the contributions that individuals make. Knowledge Management at school motivates the construction of knowledge, sharing and practice between teachers and students, in the teaching–learning process in the classroom space, as well as advising along with the improvement of teachers’ know-how, directing the understanding that the adversities of schools are associated with the scarcity of information and Knowledge Management [41]. It appears then that Knowledge Management in Education is aimed at improving decision-making across the organizations in order to promote student learning [65].

That said, it is understood that Knowledge Management is a strategy that promotes the analysis and verification of the quality of an institutional environment and also the

coordination and implementation of activities in an organization. Thus, taxonomy is seen as a tool that allows the in-depth analysis of the factors and terms that allow the identification of how a school needs to be structured and organized to promote the teaching and learning process.

In this sense, it is evident that the Political–Pedagogical Project is a resource and a tool that explains the process and the modus operandi of how to guide and coordinate the situational, conceptual and operational dimensions of a school. That is, how to organize and relate the pedagogical proposal with the concepts, the training and evaluation that the school wants to define as characteristics of the organization.

By analyzing the three dimensions of the Pedagogical Political Project—situational, conceptual and operational—we can see that Knowledge Management can collaborate in each one with the purpose of emphasizing the stages of organizing a document that is structuring for a school that reports to the objective to relate school education to the labor market, as well as innovation with educational resources, to promote a learning space that affects the needs of the community and the social transformation of the place that the school has access to. Knowledge Management aggregates information and proposals regarding management with a process with tools and practices that result in a school organization that is geared towards the knowledge society, for the promotion of a school space involved in innovation, in research and in the solution of problems that refer to their reality and context [63]. Finally, in relation to the Knowledge Management applied in structuring the Pedagogical Political Project, while this aims to be a guiding document for the actions and objectives of each school to promote functional training processes for a citizen, it is understood that the resources that involve the school structure need to be used, applied and recognized by everyone who works in the school [66], not only the management, but each employee who has a professional role in providing access to information, knowledge, the school curriculum and practical actions that promote the teaching and learning.

Author Contributions: Conceptualization, A.d.C.G.C., C.R.P.S., L.F.D.F. and R.S.; methodology, A.d.C.G.C., C.R.P.S., L.F.D.F. and R.S.; Formal analysis, A.d.C.G.C. and C.R.P.S.; supervision, F.M.; writing—original draft, A.d.C.G.C. and L.F.D.F.; writing—review and editing, R.G.; validation, R.S.; resources, R.G. and F.M.; All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Acknowledgments: Radu Godina acknowledges Fundação para a Ciência e a Tecnologia (FCT-MCTES) for its financial support via the project UIDB/00667/2020 (UNIDEMI). Letícia Fleig Dal Forno and Rejane Sartori acknowledges Cesumar Institute of Science, Technology and Innovation (CISTI).

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Quarchioni, S.; Paternostro, S.; Trovarelli, F. Knowledge Management in Higher Education: A Literature Review and Further Research Avenues. *Knowl. Manag. Res. Pract.* **2020**, *1*–16. [CrossRef]
2. Ishak, R.; Mansor, M. The Relationship between Knowledge Management and Organizational Learning with Academic Staff Readiness for Education 4.0. *Eurasian J. Educ. Res.* **2020**, *20*, 169–184. [CrossRef]
3. Mohammad, M.; Jose, G.J.A. An Analysis of Knowledge Management in Educational Institution. *Int. J. Appl. Sci. Manag.* **2016**, *2*, 211–218.
4. Sallis, E.; Jones, G. *Knowledge Management in Education: Enhancing Learning & Education*; Routledge: London, UK, 2013; ISBN 978-1-135-88387-4.
5. Edge, K. Powerful Public Sector Knowledge Management: A School District Example. *J. Knowl. Manag.* **2005**, *9*, 42–52. [CrossRef]
6. Amy, M. *Knowledge Management and Higher Education: A Critical Analysis: A Critical Analysis*; Idea Group Inc (IGI): Calgary, AB, Canada, 2005; ISBN 978-1-59140-511-5.
7. Choo, C.W. *The Knowing Organization: How Organizations Use Information to Construct Meaning, Create Knowledge, and Make Decisions*, 2nd ed.; Oxford University Press: New York, NY, USA, 2005; ISBN 978-0-19-517678-0.
8. Lau, C.L.; Al-Hawamdeh, S. Knowledge Management Education and Curriculum Development. *J. Inf. Knowl. Manag.* **2002**, *1*, 99–118. [CrossRef]
9. Takeuchi, H.; Nonaka, I. *Hitotsubashi on Knowledge Management*, 1st ed.; Wiley: Singapore, 2004; ISBN 978-0-470-82074-2.

10. Johannessen, J.-A. *Knowledge Management Philosophy: Communication as a Strategic Asset in Knowledge Management*; Emerald Publishing Limited: Bingley, UK, 2020.
11. North, K.; Maier, R.; Haas, O. (Eds.) *Knowledge Management in Digital Change: New Findings and Practical Cases*, 1st ed.; Springer: Berlin/Heidelberg, Germany, 2018.
12. Nonaka, I. *The Knowledge-Creating Company*; Harvard Business Review Press: Brighton, MA, USA, 2008.
13. Jannuzzi, C.S.C.; Falsarella, O.M.; Sugahara, C.R. Knowledge Management: A Model Study and Its Relationship with Innovation in Organizations. *Perspect. Ciênc. Inf.* **2016**, *21*, 97–118. [[CrossRef](#)]
14. Cheng, E.C.K. Managing Records and Archives in a Hong Kong School: A Case Study. *Rec. Manag. J.* **2018**, *28*, 204–216. [[CrossRef](#)]
15. Liebowitz, J.; Frank, M. *Knowledge Management and E-Learning*; CRC Press: Boca Raton, FL, USA, 2016; ISBN 978-1-4398-3726-9.
16. Chu, K. Leading Knowledge Management in a Secondary School. *J. Knowl. Manag.* **2016**, *20*, 1104–1147. [[CrossRef](#)]
17. Wiig, K.M. *Knowledge Management Foundations: Thinking about Thinking—How People and Organizations Represent, Create and Use Knowledge*; Schema Press: Arlington, TX, USA, 1994; ISBN 978-0-9638925-0-8.
18. Nonaka, I.; Takeuchi, H. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, 1st ed.; Oxford University Press: New York, NY, USA, 1995; ISBN 978-0-19-509269-1.
19. Stewart, T.A. *Intellectual Capital*, 1st ed.; Doubleday Business: New York, NY, USA, 1997; ISBN 978-0-385-48228-8.
20. Davenport, T.H.; Prusak, L. *Working Knowledge: How Organizations Manage What They Know*; Harvard Business Press: Brighton, MA, USA, 2000; ISBN 978-1-4221-6068-8.
21. European Committee for Standardization. *European Guide to Good Practice in Knowledge Management-Part 1: Knowledge Management Framework*; European Committee for Standardization: Brussels, Belgium, 2004.
22. Saini, R. Model Development for Key Enablers in the Implementation of Knowledge Management. *IUP J. Knowl. Manag.* **2013**, *11*, 46–62.
23. Dalkir, K. *Knowledge Management in Theory and Practice*, 3rd ed.; The MIT Press: Cambridge, MA, USA, 2017; ISBN 978-0-262-03687-0.
24. Paschek, D.; Ivascu, L.; Draghici, A. Knowledge Management—The Foundation for a Successful Business Process Management. *Procedia Soc. Behav. Sci.* **2018**, *238*, 182–191. [[CrossRef](#)]
25. Beesley, L.G.A.; Cooper, C. Defining Knowledge Management (KM) Activities: Towards Consensus. *J. Knowl. Manag.* **2008**, *12*, 48–62. [[CrossRef](#)]
26. Senge, P.M.; Cambron-McCabe, N.; Lucas, T.; Smith, B.; Dutton, J. *Schools That Learn (Updated and Revised): A Fifth Discipline Fieldbook for Educators, Parents, and Everyone Who Cares About Education*, Revised ed.; Currency: New York, NY, USA, 2012; ISBN 978-0-385-51822-2.
27. Nunes, C. Historiografia comparada da escola nova: Algumas questões. *Rev. Fac. Educ.* **1998**, *24*, 105–125. [[CrossRef](#)]
28. Campos, R.; Shiroma, E. O resgate da Escola Nova pelas reformas educacionais contemporâneas. *Rev. Bras. Estud. Pedagóg.* **1999**, *80*. [[CrossRef](#)]
29. Vieira, C.E. O Movimento pela Escola Nova no Paraná: Trajetória e idéias educativas de Erasmo Pilotto. *Educ. Rev.* **2001**, 53–72. [[CrossRef](#)]
30. Carvalho, M.M.C. De Pedagogia da Escola Nova e usos do impresso: Itinerário de uma investigação. *Educação (UFES)* **2005**, *30*, 87–104.
31. Borges, A. From Patronage Politics to Community Deliberation: The Recent Experience of Democratic School Management in Brazil. *Public Adm. Dev.* **2007**, *27*, 273–282. [[CrossRef](#)]
32. Hägg, G.; Gabriellsson, J. A Systematic Literature Review of the Evolution of Pedagogy in Entrepreneurial Education Research. *Int. J. Entrep. Behav. Res.* **2019**, *26*, 829–861. [[CrossRef](#)]
33. Li, W. Complementary Schools, Past, Present and Future. *Lang. Educ.* **2006**, *20*, 76–83. [[CrossRef](#)]
34. Teitelbaum, K. *Critical Issues in Democratic Schooling: Curriculum, Teaching, and Socio-Political Realities*; Routledge: London, UK, 2020; ISBN 978-1-00-005811-6.
35. Everard, K.B.; Morris, G.; Wilson, I. *Effective School Management*; SAGE: Newcastle upon Tyne, UK, 2004; ISBN 978-1-4129-0049-2.
36. Gold, A.; Evans, J.M. *Reflecting on School Management*; Psychology Press: East Sussex, UK, 1998; ISBN 978-0-7507-0805-0.
37. Antonio, D.M.S. Creating Better Schools through Democratic School Leadership. *Int. J. Leadersh. Educ.* **2008**, *11*, 43–62. [[CrossRef](#)]
38. Williams, K. The Case for Democratic Management in Schools. *Ir. Educ. Stud.* **1989**, *8*, 73–86. [[CrossRef](#)]
39. Coyle, M. Teacher Leadership vs. School Management: Flatten the Hierarchies. *Clear. House J. Educ. Strateg. Issues Ideas* **1997**, *70*, 236–239. [[CrossRef](#)]
40. Cheng, E.C.K. *Knowledge Management for School Education*; Springer: Berlin/Heidelberg, Germany, 2014.
41. Chu, K.W.; Wang, M.; Yuen, A.H.K. Implementing Knowledge Management in School Environment: Teachers' Perception. *Knowl. Manag. E-Learn. Int. J.* **2011**, *3*, 139–152.
42. Gautério, V.L.B.; Rodrigues, S.C. Os Ambientes de Aprendizagem possibilitando transformações no ensinar e no aprender. *Rev. Bras. Estud. Pedagóg.* **2013**, *94*, 603–618. [[CrossRef](#)]
43. Da Silva Llerena, R.A.; Duarte, E.N.; Santos, R.d.R. Gestão do conhecimento e desafios educacionais contemporâneos. *Questão* **2015**, *21*, 222–242. [[CrossRef](#)]
44. Riddle, S.; Apple, M.W. *Re-Imagining Education for Democracy*; Routledge: London, UK, 2019; ISBN 978-1-00-000692-6.

45. Dos Santos Filho, J.C. The Recent Process of Decentralization and Democratic Management of Education in Brazil. *Int. Rev. Educ.* **1993**, *39*, 391–403. [[CrossRef](#)]
46. Freire, P. *Pedagogia da Autonomia: Saberes Necessarios A Pratica Educativa*, 1st ed.; Paz and Terra: São Paulo, Brazil, 2011; ISBN 978-85-7753-163-9.
47. Cheng, E.C.K.; Wu, S.W.; Hu, J. Knowledge Management Implementation in the School Context: Case Studies on Knowledge Leadership, Storytelling, and Taxonomy. *Educ. Res. Policy Pract.* **2017**, *16*, 177–188. [[CrossRef](#)]
48. Cheng, E. Successful Transposition of Lesson Study: A Knowledge Management Perspective. In *Springer Briefs in Education*; Springer: Singapore, 2019; ISBN 9789811324710.
49. Light, P.; Butterworth, G. *Context and Cognition: Ways of Learning and Knowing*; Routledge: London, UK, 2016; ISBN 978-1-317-23772-3.
50. Atwood, S.; Turnbull, W.; Carpendale, J.I.M. The Construction of Knowledge in Classroom Talk. *J. Learn. Sci.* **2010**, *19*, 358–402. [[CrossRef](#)]
51. Schwarz, B.; Dreyfus, T.; Hershkowitz, R. *Transformation of Knowledge through Classroom Interaction*; Routledge: London, UK, 2009; ISBN 978-1-134-00732-5.
52. Cheng, E.C.K.; Lee, J.C.K. Knowledge Management Process for Creating School Intellectual Capital. *Asia-Pacific Edu. Res.* **2016**, *25*, 559–566. [[CrossRef](#)]
53. Chaves, A.D.; Luguetti, C.N.; Carbinatto, M.V. Physical Education in the Brazilian Educational Law and National Curriculum Guidelines. *Int. J. Educ. Pedagog. Sci.* **2011**, *5*, 729–733.
54. Penteadó, M.G.; Marcone, R. Inclusive Mathematics Education in Brazil. In *Inclusive Mathematics Education: State-of-the-Art Research from Brazil and Germany*; Kolloosche, D., Marcone, R., Knigge, M., Penteadó, M.G., Skovsmose, O., Eds.; Springer International Publishing: Cham, Switzerland, 2019; pp. 7–12. ISBN 978-3-030-11518-0.
55. Motta, S.C. Emancipation in Latin America: On the Pedagogical Turn. *Bull. Lat. Am. Res.* **2017**, *36*, 5–20. [[CrossRef](#)]
56. Venâncio, L.; Darido, S.C. A Educação Física Escolar e o Projeto Político Pedagógico: Um Processo de Construção Coletiva a Partir Da Pesquisa-Ação. *Rev. Bras. Educ. Fís. Esporte* **2012**, *26*, 97–109. [[CrossRef](#)]
57. Akkari, A. Improving Basic Education in Brazil. In *Second International Handbook on Globalisation, Education and Policy Research*; Zajda, J., Ed.; Springer: Dordrecht, The Netherlands, 2015; pp. 605–613. ISBN 978-94-017-9493-0.
58. Jennings, L.B.; Matta, G.B.D. Rooted in Resistance: Women Teachers Constructing Counter-pedagogies in Post-authoritarian Brazil. *Teach. Educ.* **2009**, *20*, 215–228. [[CrossRef](#)]
59. Iinuma, M. Learning and Teaching with Technology in the Knowledge Society: New Literacy, Collaboration and Digital Content. In *Springer Briefs in Education*; Springer: Singapore, 2016; ISBN 978-981-10-0142-0.
60. Dorow, P.F.; Calle, G.A.D.; Rados, G.J.V. Knowledge Cycle as value creator: An integrative proposal. *Espacios* **2015**, *36*, 12.
61. Nóbrega-Therrien, S.M.; Guerreiro, M.d.G.d.S.; Moreira, T.M.M.; Almeida, M.I. De Political Pedagogical Project: Conception, Construction and Evaluation in Nursing. *Rev. Esc. Enferm. USP* **2010**, *44*, 679–686. [[CrossRef](#)]
62. Sarmiento, D.F.; Casagrande, C.A. The Construction of the Pedagogic Political Project: Contributions of Collaborative Action Research. *Educ. Policy Anal. Arch.* **2015**, *23*, 65. [[CrossRef](#)]
63. Ab. Samad, R.S.; Rahmad Sukor, M.I.; Syah, D.; Muslihah, E. Understanding the Implementation of Knowledge Management in High-Performance Schools in Malaysia. *SAGE Open* **2014**, *4*, 2158244014561206. [[CrossRef](#)]
64. Totin, A.; Connor, B. Evaluating Business Models Enabling Organic Additive Manufacturing for Maintenance and Sustainment. *Def. ARJ* **2019**, 380–417. [[CrossRef](#)]
65. Petrides, L.A.; Nodine, T.R. *Knowledge Management in Education: Defining the Landscape*; Institute for the Study of Knowledge Management in Education (ISKME): Half Moon Bay, CA, USA, 2003.
66. De Sales Costa, A.G.; de Almeida, A.C.F. The Political Pedagogical Project in a collective perspective. *RSD* **2020**, *9*, e1209107912. [[CrossRef](#)]

© 2021. This work is licensed under <http://creativecommons.org/licenses/by/3.0/> (the “License”). Notwithstanding the ProQuest Terms and Conditions, you may use this content in accordance with the terms of the License.