

THE MASTERY OF INFORMATION AND COMMUNICATION TECHNOLOGIES AS CONTRIBUTIONS TO THE PRACTICE OF PEDAGOGICAL COORDINATOR

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SUMMARY

In view of today's society, this article aims to provide a theoretical reflection regarding the pedagogical incorporation of Information and Communication Technologies (ICTs) in the Pedagogical Coordinator's practice, emphasizing their contributions when used appropriately and in accordance with the demands of the institution and the purpose of the PPP. To this end, a method with a reflective qualitative typology was used, from this perspective, it was based on renowned authors who contribute to a better understanding regarding pedagogical practice, educational technology and the culture of pedagogical use of technological resources. The theoretical approaches addressed presented the potential of ICTs in the pedagogical practice of this education professional, as well as the challenges for pedagogical incorporation and the relevance of the culture of pedagogical use in favor of improving the functioning of everyday school life, as well as supporting the execution of tasks. of the referred professional. Furthermore, it was observed that in the face of contemporary society, digital culture, obtaining technological resources is not enough to provide transformations. It is essential for the school to be subject to the new, to changes that are inevitable and to use them in a way that enables favorable changes in the educational process. Therefore, through the results of the analysis of the collected data, it became clear how significant it is for the Pedagogical Coordinator to master such resources, since, as an articulate, teacher trainer and active participant in educational processes, it was noticed that ICTs tend to contribute to its pedagogical practice by providing agility and effectiveness. Therefore, it is necessary to seek to understand these technological tools to take advantage of their potential and promote pedagogical and effective incorporation.

Key words: Pedagogical Coordinator. ICTs. Pedagogical Practice.

ABSTRACT

Given the current society, this article aims to provide a theoretical reflection on the pedagogical incorporation of Information and Communication Technologies (ICTs) in the practice of the Pedagogical Coordinator regarding their contributions when used properly and in accordance with the demands of the institution and purpose of the PPP. To this end, a method with qualitative reflective typology was used. In this perspective, it was based on renowned authors who contribute to a better understanding of the pedagogical practice, educational technology and culture of the pedagogical use of technological resources. The theoretical approaches presented presented the potentialities of ICTs in the pedagogical practice of this professional education, as well as the challenges for pedagogical incorporation and the relevance of the culture of pedagogical use in order to improve the functioning in school daily life, as well as support in the execution of tasks. referred professional. Furthermore, it was observed that in contemporary society, digital culture, obtaining technological resources is not

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enough to provide transformations. It is essential that the school be subject to the new, changes that are inevitable and use them in a way that enables favorable changes in the educational process. Thus, through the results of the analysis of the collected data, it became clear how significant it is for the Pedagogical Coordinator to master such resources, since, while articulated, teacher trainer and active participant in educational processes, ICTs tend to be contribute in the pedagogical practice of the same due to provide agility and effectiveness. Thus, it is necessary to seek to understand about these technological tools to take advantage of their potential and provide the pedagogical and effective incorporation.

Keywords: Pedagogical Coordinator. ICTs. Pedagogical Practice.

1. INTRODUCTION

In the institutions where I carried out a supervised internship in the pedagogy course, it was possible to notice that, during the period in which I accompanied the Pedagogical Coordinator, the multiple functions of this professional, such as: coordinating with the school community, assisting the teacher in pedagogical planning, promoting organization of educational processes, in addition to providing assistance to parents or guardians and students. It then became clear that there was a necessary search for resources that could contribute effectively to this pedagogical practice. Given the above and given the contemporary society in which we live, which is increasingly technological, advances in information and communication technologies (ICTs) emerge as resources that tend to facilitate the execution of pedagogical tasks. From this perspective, these technologies contribute significantly to the role of the Pedagogical Coordinator, as they assist in the continued training of teachers through Virtual Learning Environments (VLE) and Distance Education (EAD) and facilitate the teaching processes, through applications, programs, software and the internet. In addition to the contributions of these technological tools available in institutions, there are also implications regarding their introduction into processes and difficulties in their appropriate use by professionals.

This research referred to the transformations and technological advances experienced by the educational sector, which in turn refers to the emergence of various technological resources available in educational institutions today, such as the use of computers, software, simulators, digital whiteboards, projectors multimedia, cell phone applications and current internet resources. ICTs, through the use of computational resources, enable and optimize processes and are relevant in the preparation or adaptation of important documents, which we can list: the Political Pedagogical Project (PPP), the school regulations, the school calendar, class reports and grade report. The benefits that these resources provide are undeniable, both in pedagogical, administrative and financial tasks. Likewise, communication technologies can also enable the articulation of

community with the school, since, through technological communication resources, students, families and different professionals, everyone who collaborates with the institution has a greater possibility of articulation/communication, as such technological resources are widely used by everyone. In this sense, and due to these contributions that are available to the Pedagogical Coordinator, the article in question intends to research the contributions of ICTs, available in institutions, and how these resources are used by the Pedagogical Coordinator in their daily practice, that is, to what extent mastering these technologies provides efficiency and practicality in the practice of this professional. Thus, the relevance of technological tools in the practice of the same highlights how essential it is to understand their functionalities.

This article therefore aims to emphasize the importance of mastering the ICTs available in institutions and their contributions to the Pedagogical Coordinator's practice, since he or she is an articulator and mediator of pedagogical practices. In this way, this professional, obtaining continued training appropriate to technological knowledge and enjoying the benefits it offers - as a didactic-pedagogical tool to be incorporated appropriately - tends to contribute significantly to the institution's pedagogical activities.

Through a bibliographical review of academic productions that deal with the use and importance of information and communication technologies in the practice of Pedagogical Coordinators, this article is organized into 3 chapters: the first addresses the benefits of ICTs in the practice of this professional, which aims to promote understanding of its potential; the second refers to the difficulties regarding the pedagogical incorporation of ICTs, with the aim of instigating the search for methods to overcome the challenges that emerge and prevent the effective introduction of technological resources; The third portrays the potential of ICTs through the culture of pedagogical use, contemplating the capabilities of some technological tools and their performance in carrying out tasks.

two.THE BENEFITS OF ICT IN THE PRACTICE OF PEDAGOGICAL COORDINATOR

Each school institution builds its identity through its culture, its practices and the work of those who work directly in its organization: managers, teachers, support assistants and also students and their guardians. Good management of service and mediation processes, as well as internal and external communication, are essential factors in this process. The Pedagogical Coordinator is generally the protagonist of this work of articulation with the school community (various professionals from the institution,

students and families), therefore, it is directly responsible for supporting the teacher's pedagogical planning and actively participating in the preparation and/or adaptation of various documents originating from the institution, such as: school regulations, school calendar, reports and plans, in addition to being the responsible for articulating the school community for the constitution and/or adaptation of the PPP, since when this document is created in conjunction with everyone involved in the teaching process and in accordance with current laws, it tends to enable qualitative teaching and satisfactory development of the institution. Silva M. (2012, p. 58) explains the role of the Pedagogical Coordinator in establishing the PPP:

[...] the pedagogical coordinator is the one who, during the year, organizes the pedagogical team around the best fulfillment of what was established by the political-pedagogical project, coordinating its various developments: planning, monitoring and evaluation.

In this sense, it is clear how this professional's work achieves a prominent role in the school context. Its mediating role makes it capable of strengthening the partnership between parents and the school, articulating curricular proposals and educational guidelines with teachers' plans. This education professional, in addition to being responsible for pedagogical tasks, participates in administrative and financial functions and is responsible for guiding teachers regarding pedagogical planning, curricular organization, appropriate methodologies and providing opportunities for ongoing training (MONTEIRO, *et.al*, 2012). It is also important to mention that, in addition to the functions discussed above, it is responsible for seeking new methods of creating or strengthening bonds between teachers/students, students/students and between school and family. It appears, therefore, that, from the perspective highlighted, it is essential that this professional masters ICTs and knows how to use them as support in their daily practice, as these technological resources, in addition to contributing to optimizing the role of the Pedagogical Coordinator, , also provide the efficient functioning of the institution.

Due to the large volume of demands from different sources and the multiple functions assigned and performed by this professional in the school institution, ICTs tend to enhance educational processes and streamline demands when pedagogically incorporated into the practice of coordination and pedagogical work. As Monteiro warns *et al.* (2012, p. 32) about the work routine of the Pedagogical Coordinator: "It is common to see [...] being swallowed up by everyday life, dedicating a large part of their time to solving emergency problems. [...] its main role is to help in the training of teachers and the pedagogical management of the school [...]".

In this aspect, the need for this professional to acquire knowledge about ICTs emerges, in favor of the satisfactory development of the institution, since it is essential for him to know, understand their functionalities, know how to apply them and, therefore, integrate them as a tool of the pedagogical work appropriately (KENSKI, 2007).

Through contemporary society, that is, in the face of digital culture that leads us to advances in information and communication technology, it is increasingly urgent that the technological resources available in the institution be used as a work tool, aiming to improve education .

According to Miranda (2007, p. 43), "the term Information and Communication Technologies (ICT) refers to the combination of computational or IT technology with telecommunications technology [...]". Thus, these technologies, when used in teaching and learning processes, can be considered as educational technologies, as they provide new information and knowledge at all times, thus providing opportunities for the constant construction of knowledge.

Using technological resources that may be available at the institution, such as: television, telephone, mobile device, multimedia projectors, software, computer and internet, Kenski (2007, p.46) states that

For ICTs to bring changes to the educational process, [...] they need to be understood and incorporated pedagogically. This means that it is necessary to respect the specificities of teaching and the technology itself to ensure that its use really makes a difference. It is not enough to use the television or computer, you need to know how to use the chosen technology in a pedagogically correct way.

It appears that although the institution has technological resources available, they will only benefit the educational process if they are understood as a pedagogical tool, at the service of school practice and processes. Candau (1979, p.66), also highlights that

For Educational Technology to be an instrument for seeking relevance, it is necessary to continually ask questions relating to who, what for and why of its contribution to the analysis and solution of educational problems [...].

Due to what has been mentioned, it is essential to understand the technologies and seek understanding of how these resources can contribute to the institution's demands. Therefore, the Pedagogical Coordinator, aware of educational demands, and knowledgeable about these technologies, tends to master ICTs, and, from then on, be a disseminator, an encourager, one who, in addition to effectively and effectively using technology resources, also motivates and encourages their use in teachers' pedagogical planning, providing opportunities for their introduction and use appropriately. Thus, ICTs incorporated into

The Pedagogical Coordinator's practice not only serves as support, but also benefits the favorable functioning of the institution.

3. DIFFICULTIES ABOUT THE PEDAGOGICAL INCORPORATION OF ICTs

ICTs enable communication and tend to contribute significantly to the educational process, so the importance of technological resources in the institution becomes clear. However, the pedagogical and active incorporation of these resources implies difficulties and challenges, such as: obsolete equipment, lack of resources for technical maintenance, insufficient planning for the pedagogical use of technological tools; the inflexible and archaic school that prioritizes formal education to the detriment of the student's comprehensive training; and, also, unforeseen situations in daily school life. These are obstacles to be overcome, as Sancho (2006, p. 19) emphasizes.

[...] many people interested in education saw digital information and communication technologies as the new determinant, the new opportunity to rethink and improve education. However, [...] the recent history of education is full of *broken promises*, of unfulfilled expectations, generated with each new wave of technological production (from pocket books to videos or the computer itself). We must consider the problems associated with the failure to incorporate each of these media into classes and how we can help to better plan their integration into teaching and learning processes.

Therefore, in search of improvement in education, those involved in the educational sector must understand the possibilities and potential of implementing ICTs, and, consequently, carry out planning that leads to the adequate incorporation of technological resources into classes and the favorable development of the teaching and learning process.

According to Moran (2012, p. 48) "video and other technologies can be used to both organize and disorganize knowledge. It depends on how and when we use them." It is clear, then, that inappropriate use is another difficulty regarding the pedagogical incorporation of ICTs. Since it is one of the guiding threads for building knowledge and developing skills. On the other hand, if it is used only as an end in itself, it can deconstruct and negatively interfere with educational processes, as it will not add pedagogical value to the activities developed.

In addition to these negative factors mentioned, another complicating factor is the school itself, as a conventional institution, still resistant to change. Schools, like any social environment, also have a set of organizational culture, and due to this culture, which largely consists of norms and rules, it tends to be rigid and inflexible in the face of transformations. In view of this, Bolívar (1997) cited by Novais (2003) mentions

that institutions, although dedicated to the learning process, are resistant to the act of learning. Regarding organizational culture to the detriment of teaching improvement and the need for quality educational changes, Lück (2014, p. 129) clarifies:

It is easy to see that the school spends great efforts to preserve an established culture, its persistent way of being and doing, to the detriment of improving the quality of teaching, according to the needs of a time in which the rapidity of change is the keynote. In this regard, it is essential to warn that schools cannot fail to absorb the lessons of history that demonstrate that there is nothing as inevitable in society as change. This same story identifies that organizations and social groups that fail to renew themselves are doomed to quickly become anachronistic and lose their vitality and even their reason for being.

In this way, it is evident that it is important for students to be flexible, innovative in the face of changes that emerge in contemporary society and not adhere to a stagnant, inert stance in the face of such transformations. Since they reflect on the quality of teaching, as well as on the development of the institution and the accumulation of demands.

Due to institutional demands in daily school life, the Pedagogical Coordinator faces obstacles to effectively fulfilling his/her planning, thus making it difficult to achieve institutional and pedagogical objectives. He often needs to delegate functions and distribute tasks, tasking other professionals with their duties, due not only to unforeseen situations that are common in the school environment, but also to the accumulation of work and the lack of daily planning. These are factors that drive the search for suitable means to enable the pedagogical incorporation of ICTs. According to Almeida (2005) cited by Oliveira (2017, p. 153), these demands often prevent the Pedagogical Coordinator from performing their real functions:

The predominance of unforeseen situations, existing in the daily life of the pedagogical coordinator, demonstrates that he begins to have difficulties in planning his work routine. [...] and assume responsibility for non-compliance with their planning or for deviation from tasks inherent to their role that are left aside due to emergencies that arise in daily school life. [...] Unexpected situations are resolved as the day progresses, characterizing the pedagogical coordinator as a "fire extinguisher".

Given the above, it is clear that given the advances in technology, obtaining technological and media resources are not sufficient to offer contributions to the educational process, which represents one of the greatest challenges regarding the pedagogical incorporation of ICTs. Therefore, it is pertinent that those involved in the process remain in constant training, as changes in this area are rapid and inevitable. Therefore, the need for continued training is an essential factor to avoid failure in this endeavor towards the effective use of technological resources. Planning is another fundamental factor in providing opportunities for

pedagogical incorporation of these resources, which contemplates the potentialities and weaknesses of this incorporation into the processes of the school institution. Due to what has been mentioned, it is evident that the Pedagogical Coordinator, in order to better fulfill his functions (as mediator of the school community, organizer of educational processes and mediator of teachers/teachers), by mastering and understanding the functionalities of ICTs, It provides an improvement in the quality of teaching, as well as the favorable development of the institution as a whole. It is important, above all, that this education professional instigates and cultivates in the school community a culture of pedagogical use of technological tools, thus enabling the aforementioned challenges to be overcome.

4. THE POTENTIAL OF ICT THROUGH THE CULTURE OF PEDAGOGICAL USE

Previously, we discussed the benefits that ICTs provide and the difficulties that arise from their non-use or inappropriate use, resulting in obstacles, which in turn make their pedagogical and permanent incorporation into the institution unfeasible. It is possible that the Pedagogical Coordinator already uses many of the resources in his daily social life that he could also use in pedagogical practice, such as: cell phone applications, software, internet, wikis, chats. Focus was given to some of these resources, but also to those used for studies such as Virtual Learning Environments (VLE) normally used for Distance Education (EAD) courses. These resources are already inserted into everyday life in such a way that it is impossible to think about performing daily tasks, communicating or studying without using them. The aim is, then, to highlight the potential that technological resources enable when their use becomes a habitual practice to the point of becoming a culture, that is, being so rooted in everyday life and inherent to the execution of the Pedagogical Coordinator's tasks that he don't even notice it or make an effort to use it. Through this culture of pedagogical use of ICTs, it is possible for this professional to also encourage other professionals, inserting these technological resources and tools into pedagogical planning and taking advantage of their contributions to the scientific and didactic-pedagogical nature.

In this context, meeting the demands of tasks aimed at this professional, Oliveira (2012) highlights that it is viable to use applications, software, such as: word processors and electronic spreadsheets, due to their potential. In relation to educational processes, word processors provide the opportunity to prepare and/or adapt documents originating from the institution, as it is possible to modify the file as many times as desired. With regard to the electronic spreadsheet, it is possible to organize information and data,

in tables and graphs, in addition to benefiting the construction/production of reports, they also enable quick calculations, as well as exposing subjects such as functions, averages, among others; being able to make a graphical representation, which therefore provides a better understanding of this information (OLIVEIRA, 2012). In addition to these benefits, according to Silva T. (2012, p. 123) ICTs “[...] in particular the internet, today allow for greater plurality [...] of content and opinions [...]”, therefore, enabling new information at all times, which facilitates the construction of critical knowledge, due to access to diverse information. The resources mentioned are clear examples of technological tools that can benefit the Pedagogical Coordinator in carrying out daily tasks that would take hours, days or even months to complete. Regarding the potential of ICTs as a facilitator of articulation between school and school community, Silva T. (2012, p. 123) states that

[...] with digital technologies and environments such as personal computers, mobile devices, internet, web, instant messengers, chats, forums and wikis, ordinary citizens have more possibilities to express themselves, expanding their reach temporally and spatially.

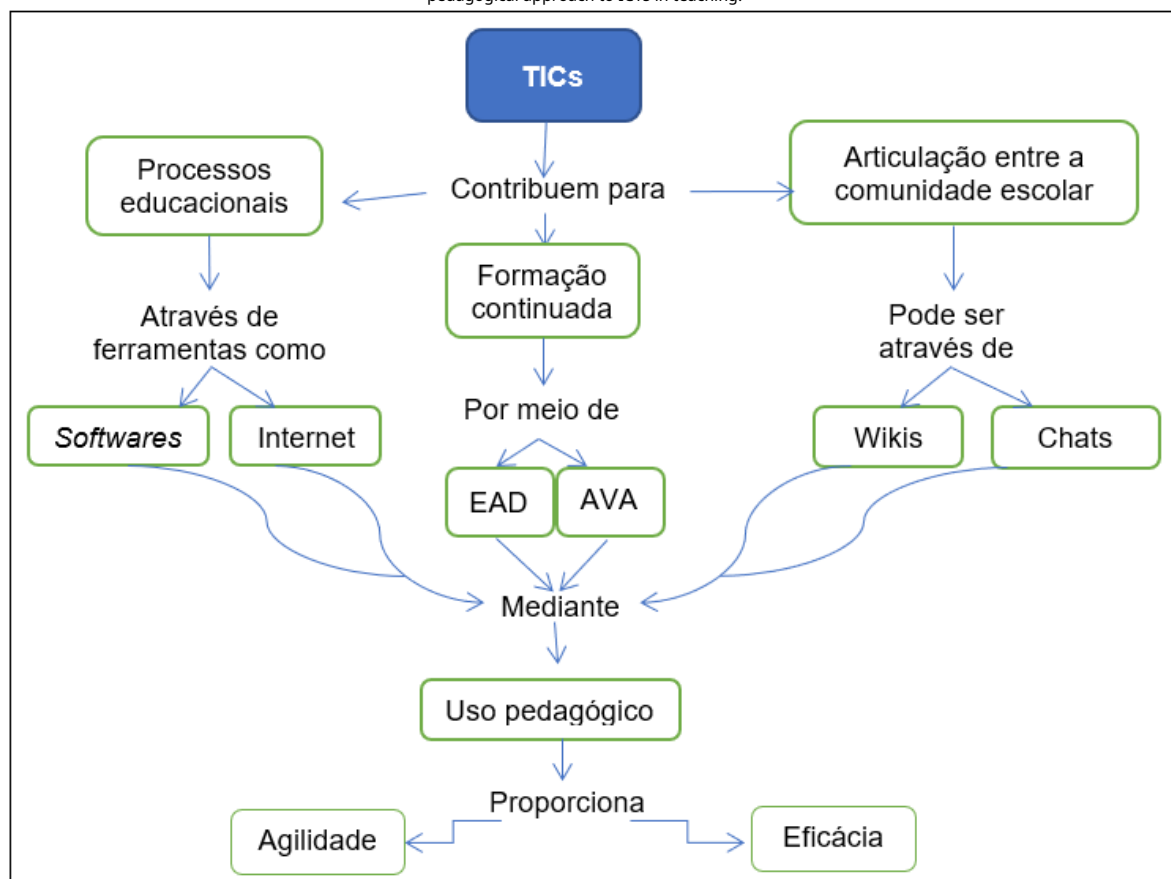
Thus, the possibility of communication between everyone is much greater, since through digital culture, students, families and various professionals from the institution make use of these technological resources to communicate. It is then clear how important the pedagogical use of these technological tools is, as they overcome the obstacles of time and geographic space, facilitating articulation and communication between school and school community. According to the Ministry of Education, Brazil (2007, p.11), AVAs are:

[...] programs that allow the storage, administration and availability of content in Web format. Among these, the following stand out: virtual classes, learning objects, simulators, forums, chat rooms, connections to external materials, interactive activities, virtual tasks (Webquest), modelers, animations, collaborative texts (wiki).

In this sense, the Pedagogical Coordinator, as a mediator, must guide and encourage the process of continued training of in-service teachers. The Virtual Learning Environment (VLE) can be an important tool in this process, as it provides training through Distance Education (EAD), that is, content can be posted and accessed from anywhere with internet access. *Moodle* is an EAD platform that can be configured in a VLE both for use in continuing teacher training and for didactic-pedagogical use (teacher/student). The Ministry of Education (MEC) also offers several distance learning courses for the continued training of teachers and coordinators, as well as suggestions for new practices and lesson plans for the different curricular components. Therefore, the teacher, when obtaining new knowledge, methodologies,

content through VLEs, feels encouraged to use technological resources, which in turn help in their practice. Below, a conceptual map is presented, in order to demonstrate, in a concrete way, the flow of incorporation of ICTs in institutions in order to be incorporated into school culture and their contributions to the Pedagogical Coordinator's pedagogical practice.

Figure 1-Conceptual map of the graphic representation of the conception of culture to be implemented using pedagogical approach to ICTs in teaching.



By analyzing the map, it is clear that technological resources, when used appropriately and in a pedagogical manner, according to the demands of the institution, result in the agility and effectiveness of processes. Therefore, a culture of pedagogical use of technological resources in the school environment is essential.

Given the focus, the contributions of these resources to the pedagogical practice of this education professional, when using the computer, are evident. It is understood, then, that it is extremely important that the Pedagogical Coordinator encourages the school community to adopt a culture of pedagogical use/handling of technological resources, in addition, the potential of these resources in carrying out daily school tasks is demonstrated. In this sense, the

ICTs tend to contribute to the practice of the aforementioned professional, as well as predisposing the good development/functioning of the institution.

5. METHODOLOGY

The research consisted of a bibliographical review and theoretical foundation. We opted for content analysis of an explanatory nature, since, after making explicit the potentialities and obstacles due to the pedagogical incorporation of these technological resources, the aim was to highlight the contributions of ICTs through appropriate use and consistent with the purpose of the PPP .

Data collection took place from April 2019 to November 2019, through research using books, articles and the internet. In which he focused on elements such as Pedagogical Coordinator, ICTs and pedagogical practice. Also, it was based on authors such as Kenski (2007), Lück (2014), Miranda (2007), Moran (2012) and Oliveira (2017).

From the perspective of its nature and purposes, the research carried out is classified as a reflective qualitative approach. Since, through careful analyzes and foundations guided by scientific knowledge, which enabled the construction of this article, contemplating the benefits and challenges regarding the pedagogical incorporation and the potential of ICTs through the culture of pedagogical use. Likewise, it allowed them to relate these with the functions relevant to the Pedagogical Coordinator and the capabilities of technological resources in their pedagogical practice. Thus, providing a better understanding of the topic, as it leads to a reflection on the relevance of the ICT domain and its contributions to the Pedagogical Coordinator's practice.

6. FINAL CONSIDERATIONS

In view of the results of the analysis of data collected from the research, it appears that the Pedagogical Coordinator has multiple functions, such as articulator, teacher trainer and referring to educational processes. Therefore, the contributions of ICTs when used for educational and pedagogical purposes become clear, as they tend to provide efficiency and practicality in the execution of tasks. From this perspective, it is understood that these technologies can benefit both the pedagogical practice of the aforementioned professional and the improvement of the institution's development processes.

Regarding the pedagogical incorporation of technological resources in pedagogical practice, as well as in the institution, there are implications and difficulties, due to the lack of a

pedagogical use or non-use of resources; to unforeseen emergencies in daily school life, which at times make it impossible for the Pedagogical Coordinator to carry out their duties effectively; and in the face of the conventional school that values its organizational culture, to the detriment of updating methodologies and resources, becoming resistant to change. Thus, it appears that it is essential that the school is open to technological innovations, both in the articulating practices of pedagogical coordination, as well as in the work of the collective of teachers, in continued training and planning, as these constitute subsidies that can provide overcoming the aforementioned challenges, and enabling the perpetuation of the culture of pedagogical use of technological tools.

Finally, regarding the potential of ICTs in the culture of pedagogical use, it was clarified how significant it is for the Pedagogical Coordinator to encourage and implement the use of technological resources to mediate and articulate pedagogically with the school community. Furthermore, in relation to the contributions of the domain of information and communication technologies in the Pedagogical Coordinator's practice and in educational processes, it was evident that it is necessary for him to seek methods to enable the pedagogical use of ICTs in the continuing training of teachers and in articulation between school and school community.

Due to what was discussed, it became clear that having technological resources is not enough to provide improvements in the Pedagogical Coordinator's practice, it is extremely important that the education professional understands the functionalities, implications and relevance of these resources, in order to then lead the effective incorporation pedagogical approach to ICTs. In view of the above, it is concluded that the Pedagogical Coordinator, due to his functions, needs to master ICTs not only to benefit from their contributions in his pedagogical practice, but also to enhance the incorporation/ pedagogical use of technological resources, which therefore provides progress and improvement in teaching in pedagogical processes.

It is understood then that, although there are bibliographical references to all the resources and applications mentioned, the productions in relation to social networks, and instant communication applications, such as Facebook, Instagram and WhatsApp and the bibliographies found and correlating the Coordinator's practices Pedagogical are insufficient.

REFERENCES

BRAZIL, Ministry of Education. **References for developing teaching material for distance learning in Professional and Technological Education**. Brasília, DF, 2007. Available at: http://ltcead.nutes.ufrj.br/vivencias/recursos/45ref_materialdidatico.pdf. Accessed on: 09/27/2019.

CANDAU, Vera Maria Ferrão. Educational technology: concepts and challenges. **Research Notebook**, n. 28, 1979. Available at: <http://publicacoes.fcc.org.br/ojs/index.php/cp/article/view/1696/1682>. Accessed on: 06/01/2019.

KENSKI, Vani Moreira. **Education and technologies: the new pace of innovation**. 3rd ed. Campinas, SP: Papirus, 2007. ISBN 978-85-308-0828-0.

LÜCK, Heloisa. **Leadership in school management**. v. 4, Management Notebooks Series. 9. ed. Petrópolis, RJ: Vozes, 2014. ISBN 978-85-326-3620-1.

MIRANDA, Guilhermina Lobato. **Limits and possibilities of ICT in education**. Revista de Ciências da Educação, n.3, May/Aug 2007, ISSN 16494990. Available at: <<http://ticsproeja.pbworks.com/f/limites+e+possciencias.pdf>>. Accessed on: 06/05/2019.

MONTEIRO, Elisabete; *et al.*. **Pedagogical Coordinator: function, routine and practice**. 1st Edition 2012. ISBN 978-85-65956-00-0. Available at: <<http://institutochapada.org.br/livros/Livro%20Coordenador%20Pedag%C3%B3gico.pdf>>. Accessed on: 06/05/2019.

MORAN, José Manuel. Foundations for innovative education. In: MORAN, José Manoel (org.). **The education we want: new challenges and how to get there**. 5th ed. Campinas, SP: Papirus, 2012. ISBN 978-85-308-0835-8.

NOVAIS, Vera Lúcia Duarte de. **School culture and the insertion of ICTs: difficulties and opportunities**. Workshop on Information Technology in Education (wie), 2003. São Paulo. Available at: <<https://www.br-ie.org/pub/index.php/wie/article/view/769/755>>. Accessed on: 09/09/2019.

OLIVEIRA, J. Cordeiro de. **The School Daily Life of the Pedagogical Coordinator: Diversities, Tensions and Possibilities**. v. 26, no. 1, p. 143-160, Jan./Jun. 2017. E-ISSN 2316-3100. Available at: <[file:///C:/Users/rtk5156o23y7.i08/Downloads/6138-20120-1-PB%20\(10\).pdf](file:///C:/Users/rtk5156o23y7.i08/Downloads/6138-20120-1-PB%20(10).pdf)>. Accessed on: 09/26/2019.

OLIVEIRA, R. de. Information Technology in Education. In: OLIVEIRA, Ramon de (org.). **Educational Informatics**. 17. ed. Campinas, SP: Papirus, 2012. ISBN 978-85-308-0453-4.

SANCHO, Juana María. From information and communication technologies to educational resources. In: SANCHO, Juana María; Hernandez, Fernando *et al.* (org.). **Technologies to transform education**. Porto Alegre: Artmed, 2006, p. 19. ISBN 978-85-363-0709-1.

SILVA, Moacyr da. The articulating work of the pedagogical coordinator: curricular integration. In: PLACCO, Vera Maria Nigro de Souza; ALMEIDA, Laurinda Ramalho de. (org.). **The pedagogical coordinator and the challenges of education**. 5th ed. São Paulo: Ed. Loyada, 2012. ISBN 978-85-15-03597-7.

SILVA, Tarcízio. Advertising Communication in Social Information Analysis Applications: Sociotechnical Persuasion on Social Network Sites. **Communication & Market/UNIGRAN - Dourados - MS**, v. 01, no. 03, p. 120-134, Jul-Dec 2012. ISSN 2316-3992. Available at: <https://www.unigran.br/dourados/mercado/paginas/arquivos/edicoes/3/12.pdf>>. Accessed on: 09/25/2019.