1 Article

The school manager and the use of knowledge

3 management practices for structuring organizational

4 processes

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Abstract: Knowledge management gains space within the school organization and can contribute satisfactorily to the quality of teaching. In everyday life the school manager intuitively uses knowledge management practices without exploiting the potentials they offer or allow. In this context, the purpose of this work is to identify the level of implementation of knowledge management practices aimed at structuring the organizational processes used by the public school manager. The methodology adopted was exploratory, with a qualitative and quantitative approach. For data collection, an already validated instrument with twenty-seven questions was used. Respondents to the questionnaires, one hundred and eleven managers of the basic education schools that make up the public school system in a city in the northwestern region of Paraná, Southern Brazil. In analyzing the results, it was only at this point that we investigated only those practices that were related to the structuring of organizational processes. This decision is justified because of the responsibilities of the school manager in the execution of his work. The results

indicated that the school in its daily life, makes use of practices of Knowledge Management related

to the structuring of the organizational processes and that many are already applied by the

Keywords: School manager; knowledge management practices; Organizational processes.

1. Introduction

managers.

The administration of the knowledge (GC) is a theme very discussed now, as well as their implantation levels and reach. In the extent of the school organization, it also wins space and it can contribute in a satisfactory way with the different dimensions delineated by National Council of the Secretaries of Education (CONSED). Those dimensions are considered as base for learning executes and they are the listed in the following way: administration of education results, pedagogic administration, people's administration, administration participatory and administration of services and resources. Studies confirm the importance of the practices of administration of the knowledge in the organizations, but it is still scarce the research on the subject returned to the organizational processes that they link with the people's administration. (Batista 2004; 2006; 2012), (Davenport and Prusak 2003).

In the context of the school organization, understood as democratic space that, it involves the field of the collective and conscious participation in the decisions taken to orientate, to drift and to execute the actions in all of the dimensions of the school organization. To play that part, it demands a new profile, whose great challenge for the school manager is it of offering quality education, without leaving aside the other segments of the school, as the pedagogic, the financier, the

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administrative, the legal, besides establishing a good relationship with the community (Freitas et al. 2002).

The knowledge happens starting from each individual's interpretation, in which each one builds the according to their capacities and the reality where it is or it lives together. Those constructions always happen inside of the patterns of assimilation of each learning. This way, the understands each other that the development of the knowledge can be understood as a social constructo stepped on about the determinations political, economical and cultural that move the society. Such interaction happens starting from models and instruments that start to orientate the individual's relationships or organization.

According to Vasconcelos (2000), the creation of the knowledge feels as a result of the ability of interacting with the social processes, what happens in way different from an individual for other, as well as for the organizations and, before the one that she intend to share, to create, to use or to register.

Nonaka and Takeuchi (2008) they contribute defending that the knowledge comes in an explicit and tacit way. When built through experiences and formal education lived by the individuals, expressed for words, information, encyclopedias, theories etc. it is understood as explicit knowledge. Already the tacit knowledge is that acquired through experiences lived by the individual, tornado difficult of being shared, therefore it is private ability.

The socialization of the knowledge, according to Davenport and Prusak (1998), it generates a new knowledge, independent if this had been conceived in the format tacit or explicit. Nonaka and Takeuchi (2008) regarding the conception of the knowledge they detach four types of occurrences, in that the knowledge happens and it compares it to the format of a spiral. They are them: socialization, in the situations in that the knowledge happened, in other words, of tacit for tacit. Regarding the externalização it is when the tacit knowledge is represented in explicit concepts. Already the combination is already related to the sum of new knowledge to the existent, explicit for explicit. In what the concerns Internalização, this represents the incorporation of the explicit knowledge to the tacit.

Inserted in that dynamics of the knowledge and, before the expectations that it is had regarding the quality education, the dimensions under the land of the school administration, will be able to, subsidized by the characteristics of the Administration of the Knowledge, to promote important contributions. The vision of Grotto (2001, p. 35) regarding the Administration of the Knowledge it is" [...] as the process of to promote and to administer the generation, the sharing, the use and the knowledge measurement, experiences and specializations in the organizations."According to Magalhães (2005, p. 87)," [...] the theory of the creation of organizational knowledge seats, therefore, in the relationship among the people the all of the levels. individual, group, organizational and inter-organizational."

In the field of the administration, Vieira, Almeida and Alonso (2003, p. 74) they reinforce that the school manager, drives their actions under the conception of the "co-responsibility, partnership, cooperation, interaction, solution of problems in common, dialogue, approach of all the interested parties." Santanta et al (2012) they get the attention for the changes of the society and the demands of the school administration in that the" [.] education administration should take into account: the challenges that are put to the education demanding constant revisions in the formulation of the education objectives and the changes in the society. (Santana et al. 2012, p. 63)

In this constructive element, the sharing and the distribution of the knowledge they request trust, so that she can disseminate innovative and creative ideas. That happens in the transition of the individual's knowledge for the group or for the organization. The way as the goals of the healthy knowledge" [...] formulated determines the ways for the which can be appraised" (Probst et al., 2002, p. 36). Like this, it can understand each other that the establishment of the goals is directly related to the evaluation of the knowledge.

According to Gupta and McDaniel (2002), the people possess opposed mental models, starting from which all of the information will be appraised, interpreted and they become different knowledge. Already Davenport and Pruzak (2003, p. 6) they describe knowledge as" [.] a flowing

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mixture of condensed experience, values, information contextual and experienced insight, which provides a structure for the evaluation and incorporation of new experiences and information.

The individuals that compose an organization, when motivated and capable they adopt it new models as to you structure, processes and managerial systems, with easiness will understand and they will make use of the tools made available by the Administration of the Knowledge. Understood by Terra (2005) as" [.] tool that administers the intellectual capital. Or better, she does with that the employees improve his/her development in the work, and consequently the satisfaction and the competitiveness.

Constituted by practices that use the knowledge in the processes and in the improvement of the organizations, the practice of the Administration of the Knowledge implicates in the understanding that the people are not mere processors of information, but creators of the knowledge (Magalhães 2005). In that sense Nonaka and Takeuchi (1997) they detach that the Administration of the Knowledge is composed of actions that consist, in a systematic way, to produce, to deposit, to transmit and to apply the knowledge so that the practices and you know them individual and busses are associated.

Before the exposed it is that, in this work it is had as central objective, to identify which is the level of implantation of practices of administration of the knowledge returned to the structuring of the organizational processes, used by the manager of the public school can favor the quality education. The investigated universe counted on the participation of hundred and eleven managers of the schools of basic education that compose the public net of teaching in a city of the northwest area of Paraná, South of Brazil.

The adopted methodology was the one of exploratory research, of qualitative and quantitative approach. The method of the qualitative research takes into account the meaning that the subject attributes to the practice being, therefore, that that builds and it participates in the history (Alves-Mazzotti, Gewandsznajder 2004).

The results of the quantitative research, they can be presented falling back upon the mathematical language to describe the causes and results of the research. The quantitative research is centered in the objectivity and" [...] it considers that the reality can only be understood with base in the analysis of rude data, collected with the aid of standardized instruments and neutral" (Fonseca, 2002, p. 20).

Regarding the procedure, for collection of the data, it was used of a questionnaire of practices of Administration of the Knowledge with twenty-seven subjects. That instrument, is the same, adopted by the Institute of Economical Research Applied (IPEA) already appraised and used thoroughly by Batista (2006); (2012), Batista et al. (2005), Batista et al. (2007) and Batista et al. (2014).

The questionnaire had been applied during the accomplishment of an encounter of continuous formation for school managers promoted by the Program of Excellency in the Basic (PEEB) Education on October 09 of 2017. PEEB is a program of institutional extension of the Center of Higher education of Maringá (UNICESUMAR), recorded in the section of research of the institution since 2013 under the number 084896. The has as focus, to investigate which are the impacts in the school acting and in the quality of the education considering the aspects: school administration, with the teacher, family, organized civil society and the student of the basic education of the municipal public net.

They participate now of PEEB, through agreement term signed among UNICESUMAR, the mayor of the city and the secretary of Education thirty three cities of the northwest area of South Paraná of Brazil.

In the moment of the formalization of the agreement, also authorization is granted for collection of data and accomplishment of researches in the school spaces of the municipal net of that city and both parts are guided and explained regarding the need of the ethics and secrecy regarding the data and generated information.

For that research, it was just limited to a city due to opportunity of the school managers' total concentration in the same space besides treating of the city with larger number of schools, in other words, hundred and eleven. Before to start the activity of answering to the questionnaires, it was

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presented to the participants information on the purpose as well as the warranty that the same ones would not be identified or their associated names the some given. Tends the permission and, accept of all in participating, the questionnaire was answered at the end of the formation encounter and give directly the present team of researchers in the place.

In spite of the questionnaire to contain twenty-seven subjects, the was devoted to explore at this time, only those that are framed as belonging practices the category organizational processes as: Benchmarking; Better practical; Organizational Intelligence; Mapping of the knowledge; Administration for competence; Bank of organizational competence; Bank of individual competences; Administration of the intellectual capital. Batista (2006); (2012).

The knowledge today is a factor of extreme importance for the organizations, because it is built in the relationship among individuals, it is dependent of their capacities and it serves as a source of advantage, competitive and maintainable, being capable to provide the differential necessary where they act or in that they intend to reach.

In that context, it is tends as front, to reach the objective proposed in that work, it is believed that the implantation of practices of administration of the knowledge returned to the managerial processes, even if used of intuitive way and unsystematic for the school managers, they can yes, to indicate the roads and experiences for better use of the intellectual capital that composes the professionals' of the schools team under his/her management.

The school administration involves the field of the collective and conscious participation in the decisions taken so that these are to orientate, to drift and to execute the actions in all of the dimensions of the school organization. To play that part, it demands a new profile, whose great challenge for the school manager is it of offering a quality education, without leaving aside the other segments of the school, as the pedagogic, the financier, the administrative, the legal, besides establishing a good relationship with the community (Freitas et al. 2002).

The education manager's performance, even little time behind, was related just the vision or competence. However, his/her work cannot only be seen as the one of a professional exclusively concerned with bureaucratic demands. Taking as base that nails the Federal Constitution of 1988, Freitas (2000) it detaches the need to adopt an administration pattern where the participation of those involved is collective in way to guarantee the quality of the education.

For Gonçalves and Sposito (2002), the school administration has as purpose to organize the internal and external demands of the school promoting the development of the actions and attitudes implicated in the practical action and, above all in the sphere of the work. The school administration executes bill with the processes of the different dimensions that are under his/her mark of actions and it cannot be limited to the director's illustration. She should be diluted and shared among all the ones that do part of the professionals' of the organization team. Libâneo (2013) it complements that the understanding of what comes to be school administration is going besides having a professional that drives the organization in the way that better it suits him. The school administration or to be manager of a school organization demands change of paradigm of the centralized power and unilateral. The school administration involves the field of the collective and conscious participation in the decisions taken so that these are to orientate, to drift and to execute the actions in all of the dimensions of the school organization.

Luck et al (2000) they defend that the carried out administration in a competent and committed way with the interests of the school and of the community the has positive effect on the process teach learning. The format of management of the school is that unchains the learning process and it delineates the actions and methodologies for everything to happen in an effective way and with quality. To play that part, there is demand of a new manager profile that" [.] they demonstrate merit and proven competence, be lead, develop lead participatory and democratic in the atmosphere, besides if they feel safe enough for us to live together with other leaders. Freitas et al. (2002, p. 42).

The great challenge for the school manager is it of offering a quality education, without leaving aside the other segments of the school, as the pedagogic, the financier, the administrative, the legal, besides establishing a good relationship with the community.

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In the school organizational context it is fundamental that the manager knows the totality of the dimensions that composes it and a big one allied in that task it is the Administration of the Knowledge that comes if highlighting in the school organizations, so much public as toilets, in the configuration of strategic resource for the administration. The ruled education system in the Administration of the Knowledge has as prerogative to stimulate the competences that involved offer them and, later, the competences that each person possesses individually (Emydio and, Rocha 2012).

In spite of the organizations they begin to stimulate the knowledge, to acquire it a lot of times is a long and confused process. The forms of using it are multiple and unexpected because, the individual should produce form knowledge facilitates the cooperation in his/her daily activity.

The organizations look for to use the Administration of knowledge for if they transform in spaces that stimulate the learning and the creation and sharing of the knowledge, especially in the deprived sphere, in that there is the constant challenge of generating new services and products, moved by the competitiveness of the market. In spite of the practices of Administration of the Knowledge they be used commonly in the business and industrial area, those resources can also be addressed for the school middle, since maintained the due proportions of performance and respected the legislations that govern the school institution.

The practices of Administration of the Knowledge, they were divided by Batista (2006); (2012), in three categories. They are them: Administration of human resources: the has as objective, to aid the manager in the construction of a qualified team and that it contributes in a natural way to the organizational learning, facilitating the transfer, spread and sharing of the knowledge and of the information. In the practice format, it is had the following examples: Forums / list of discussions; Corporate education; Narrative; Mentoring; Coaching; Corporate university; Practical community.

The category structuring of organizational processes is a practice with the purpose of facilitating the generation, organizational retention and spread of the organizational knowledge. Benchmarking; Better practical; Organizational intelligence; Mapping of the knowledge; Administration for competence; Bank of organizational competence; Bank of individual competences; Administration of the intellectual capital is some of the existent examples.

The technological base and functional to give support to the administration of the organizational knowledge, including the automation of the administration of the information, of the applications and of the tools of Technology of the Information for the capture, diffusion and cooperation. The Portals / intranets / extranets; System of Workflow; Administration of contents; Electronic administration of documents; Date warehouse; Decision Support Systems; Balanced Scorecard; Date Mining; Customer Relationship Management; key performance indicators; Enterprise Resource Planning illustrate a group and possibilities.

Detaching the relevance of the use of practices and tools of the Administration of the Knowledge in the structuring and transport of the managerial processes in a school organization and defending that to them they are already part of the daily, through the Picture 1 it is possible to observe the relationship of applicable practices in the development of the demands of the school context and which would be their users.

Picture 1 Practices of the Administration of the Knowledge related to managerial processes used in the context

Practices	School context	Users		
Benchmarking	Institutional evaluations, Plannings and	Teachers coordinators, technician-administrative		
	Council of Class.	employees and direction.		
Best practices	Change of experiences, pedagogic Meetings.	Teachers, coordinators, technician-administrative		
		employees and direction.		
Mapping knowledge	Rising or registration of all of the processes,	Director and administrative team.		
	existent services in the school context.			
Bank of individual	Pedagogic meetings, Planning.	Teachers, pedagogic coordinators and		

competences		technician-administrative employees.
Intelligence	Parent Meetings, School Board, Student	Families, student teachers, technical-administrative
organizational	Group.	staff and director.
Memory	Lectures and courses, change of experiences,	Teachers, pedagogic coordinators and Direction.
organizational	Pedagogic Week.	
Administration of the	Council of Class, pedagogic meetings,	Teachers, coordinators, employees technician -
capital intellectual	Plannings.	administrative and direction.
Administration for	Training courses and of formation	Teachers, coordinators, technician-administrative
competences		employees and direction.

Source: Elaborated by the authors (2018)

In the school, there are several instances that the practices and tools if and, they can be form empowered to benefit the school manager's acting. To recognize and to appropriate in the advantages that the Administration of the Knowledge offers for construction and sharing of the knowledge abbreviates roads, they minimize efforts, it avoids the rework and it strengthens the team. In that harmonious atmosphere of change, motivated by the cooperation of all involved them and in that case they stand out the professionals of the school, the quality education is closer of being cultivated.

2. Results

To answer the questionnaire, the school managers had as option a scale of organized Likert in a group of four alternatives where a (1) he/she refers to few isolated initiatives inside of the organization"; two (2) "some departments use the practice"; three (3) "many departments use the practice"; four (4) "thoroughly disseminated in the organization."

When analyzing the subjects it was obtained the relative frequency in the format of percentile for each one of the answers. The relative percentage of the alternatives of each subject was transformed on average meditated. When compiling the data and the distribution of the frequency of the answers was observed another variable, the one of those that didn't answer (n/r) that was also considered in the interpretation and classification of the results that can be observed through the Table 1.

Table 1. Frequency distribution in percentile of the scale of Likert for the implementation of the relative practices to the structuring of organizational processes in the school

	Implantation apprenticeship				
Practices	1	2	3	4	n/r
Benchmarking	4,9	15,9	17,1	59,8	2,4
Best practices	12,2	18,3	32,9	35,4	1,2
Mapping of the knowledge	26,8	22	22	26,8	2,4
Bank of individual competences	40,2	23,2	13,4	18,3	4,9
Organizational intelligence	22	19,5	30,5	25,6	2,4
Bank of organizational competences	17,1	22	29,3	29,3	2,4
Administration of the intellectual capital	12,2	24,4	13,4	41,5	8,5
Administration for competences	23,2	23,2	29,3	22	2,4
Averages	19,8	19,3	23,4	32,3	3,3

Source: Data of the Research (2018).

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When analyzing in a more detailed way them frequency it was possible to identify the level of implementation of those practices. In Tabela3, the scale of analysis of the results of the level of implantation of the practices that subsidize the structuring of organizational processes it can be observed. She presents the effective level of implantation of those practices of Administration of the Knowledge.

Table 3. Scale of analysis of the results of the level of implantation of the practices of structuring of organizational processes.

Effective level of implementation of the practices of	Results obtained		
Knowledge Management			
Low level	In between 0% a 39%		
Middle level	In between 40% a 60%		
High level	In between de 60%		

Source: Prepared by the authors (2018).

As the parameters adopted for the research, it was obtained that, on average, 23,4% of the managers considered that the practices of knowledge administration related to the structuring of organizational resources are implanted already and, 32,3% affirmed that, besides they be already implanted, such practices present important results for the organization. In other words, on average, 55,7% of the managers consider that those practices are already part of the daily.

Of those practices, Benchmarking with 59,8% was the practice that configured as medium level. Presenting the largest result regarding the implantation in the schools. Identified as present in the institutional evaluations, plannings and class pieces of advice. The practice of Bank of individual competences with 18,3% was the one that presented smaller implementation level in the schools, consisting of pedagogic meetings and pedagogic week. Mapping of the knowledge, expert as rising or registration of all the information of the school, including the processes, services and the relationship among them, it acted 26.8% what is considered of low level.

The organizational Intelligence that it is represented by the faculty and discente, pedagogic team, director, administrative team and of support it was positioned with 25,6% what means of level baixo%. Already the Banks of organizational competences that are the training courses and of formation frequented by all the professionals of the school, it appears for 29,3% or be of low level. On the Administration for competences, training courses and of formation that is also a practice that involves every team, display as result 22%, also in low level. As the Best practices than they are the changes of experiences could happen during the pedagogic meetings involving all the professionals of the school presents 35,4% o that it results in low level of implantation Already the Administration of the intellectual capital appears with 41.5%. present in the class pieces of advice, pedagogic meetings, plannings have medium level.

4. Materials and Methods

The adopted methodology, as for the nature it was the exploratory. Regarding the approach type, it is configured as qualitative and quantitative, with the participation of hundred and eleven managers of schools of basic education. These schools belong the public net of teaching of a city of the northwest area of Paraná, south of Brazil. Those managers are all educators, whose experience in the teaching is of at least two years and at the most eighteen.

In the moment of the application of the questionnaire, the hundred and eleven managers receive explanation on the objective of the application of the instrument and as the data would be treated. The secrecy of all was guaranteed and any information that could identify them. After all those explanations and emphasizing that the schools that they administer are part of the group of the thirty three cities agreements with PEEB and that, the formalization documents are signed and recognized as authorization for collection of data. In the moment of the application, the supporting documents were available for those that had interest in checking. Of the managers' part that

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you/they answered the questionnaires there was the consent and like this she proceeded her with the application.

Regarding the questionnaire, it is treated of an instrument validated already by Batista (2006); (2012), composed by twenty-seven subjects on practices of Administration of the Knowledge. The questionnaire presents a list of practices of Administration of the Knowledge that they are classified as: administration of human resources; structuring of organizational processes, technological and functional base. Beside each practice there was the description about the application with the purpose of explaining to the manager before him indicates the alternative for answers. The answers could be thrown in the column "A" or "B" where the option represented "A" implantation Apprenticeship and the option "B" Reaches inside of the organization. Before choosing for the alternative, it was necessary goes through it a menu of willing orientation in the header of the questionnaire. That menu listed a zero scale (0) to four (4) for implantation Apprenticeship and of a (1) to four (4) for Reach inside of the organization.

After the tabulation and interpretation of the data, she opted to analyze at this time, only the practices that were related the structuring of organizational processes once great incidence of "low level" was observed as for the reach in this category that support can be considered for it manages it of the school.

5. Conclusions

The results of the work indicate a medium level of implantation of the relative practices to the structuring of the organizational processes, although some are already applied for the managers and they present important results for the organization. It is ended that the implantation of practices of administration of the knowledge, even if used of intuitive way and unsystematic for the managers of the investigated schools, they can address or to present experiences for better use of the involved intellectual capital.

Under that focus and in service to the objective initially proposed, of identifying the level of implantation of the practices of administration of the knowledge returned to the structuring of the organizational processes used by the manager of the public school stands out that they favor the people's integration inside and out of the school. They provide changes of experiences, dialogues, reflections and the involvement of all with the school subjects. The involved practices, Benchmarking; Better practical; organizational Intelligence; Mapping of the knowledge; Administration for competence; Bank of organizational competence; Bank of individual competences; Administration of the intellectual capital, be for yours purpose or through involved them, in some way, they link and in the construction and sharing of the knowledge.

That whole volume of actions under the optics of the Administration of the Knowledge can offer representative subsidies for the exercise of the school administration. It is concluded then that is valid to invest in the use of such practices and that same them being part of the day by day of the work in the school context, one cannot stop exploring them in a strategic way in favor of the people's harmony that composes the organization, for the improvement of the processes, identification of the gaps or fragilities that can be announced. Still defends the relevance in investing effort in the study, not just of the practices here listed, but also to the others that are configured with forts allied in offering support the school manager.

References

- 348 (Alves-Mazzotti and Gewandsznajder 2004) Alves-Mazzotti, A.J.; Gewandsznajder, F. The Method in the Natural and Social Sciences: *Quantitative and Qualitative Research*. 2. ed. São Paulo: Pioneira, 2004.
 - (Batista 2004) Batista, F. F. 2004. I govern that learns: administration of the knowledge in the federal executive's organizations. Text for discussion n°. 1022
 - (Batista 2006) Batista, F. F. 2006. The challenge of the administration of the knowledge in the administration areas and planning of the Federal Institutions of Higher education (IFES). *Text for Discussion*, n° 1181. IPEA, Brasília.

- 355 (Batista 2012) Batista, F. F. 2012. *Model of administration of the knowledge for the Brazilian public administration:* as it implements the administration of the knowledge to introduce results in benefit to the citizen. Brasília: 357 IPEA.
- (Davenport and Prusak. 2003) Davenport, T., and Prusak. 2003. *Business knowledge*: As the organizations they manage his/her intellectual capital. 10. ed. Rio de Janeiro: Campus.
 - (Emydio and Rocha, 2012) Emydio, M. M.; Rocha, R. F. *Knowledge Management in the Educational Area*: Technology as a Facilitating Instrument. In. Symposium on Excellence in Management and Technology, 9., 2012. Resende. Anais electronic Resende: AEDB, 2012. Available at: https://www.aedb.br/seget/arquivos/artigos12/31316263.pdf Accessed on: Sep 20. 2018.
 - (Freitas et al 2002) Freitas, K. S. of, Girling, R., and Pinheiro, J. X. 2002. *Education politics and the Administration of the Public School:* culture, leadership and legislation. RBPAE, V.18, n. 1, jan / jul, p. 42 -52.
 - (Goncalves and Sposito M. P 2002) Goncalves L. A, Sposito M. P. Public initiatives to reduce school violence in Brazil. Research Notebook. 2002;
 - (Grotto 2001) Grotto, D. 2001 A look at knowledge management. Journal of Management Sciences. Florianópolis, year 3, n. 6, p. 31-37, September.
 - (Gupta and McDaniel 2002) Gupta, A and McDaniel, J (2002) Creating Competitive Advantage by Effectively Managing Knowledge: A Framework for Knowledge Management, Journal of Knowledge Management Practice, October.
 - (Libâneo 2013) Libâneo, J. C. Degree in Pedagogy: absence of specific contents of elementary education. In: Gatti, Bernadete Angelina et al. (Org.). For a National Teacher Training Policy. São Paulo: UNESP, 2013. P. 73-94
- (Lück 2009) Lück, H. 2009 School management dimensions and their competences. Curitiba: Editora Positivo.
- 377 (Fonseca 2002) Fonseca, J. J. S. Methodology of scientific research. Fortaleza: UEC, 2002. Apostila
 - (Magalhães 2005) Magalhães, R. 2005 Fundamentals of organizational knowledge management. Lisbon: Sílabo.
 - (Nonaka and Takeuchi 1997) Nonaka, I.; Takeuchi, H. 1997 Creation of Knowledge in the company: how Japanese companies generate dynamics of innovation. Rio de Janeiro: Campus.
 - (Nonaka and Takeuchi 2008) Nonaka, I.; Takeuchi, H. 2008 Theory of the creation of organizational knowledge. In: Takeuchi, H.; Nonaka, I. *Knowledge management*. Porto Alegre: Bookman, P. 54-90.
 - (Prost et al., 2002) Prost, G; Raub, S.; Romhart, K. 2002 *Knowledge management: the constructive elements of success*. Porto Alegre: Bookman.
 - (Santana et al. 2012) Santana, S. S.; Gomes, R. S.; Barbosa, J. S. 2012 The role of the manager in the elaboration and execution of the pedagogical political project in a democratic vision. *Booklets of Pedagogy*, São Carlos, v. 6 n. 11, 2012, p. 62-73.
 - (Terra 2005) Terra, J. C. C. (2015) *Knowledge management: the great business challenge*. Earth forum consultants. Available

 at: www.terraforum.com.br/biblioteca/Documents/libdoc00000011v002Gestao%20do%20Conhecimento_%2. 20% 20% 20de.pdf. Accessed on: June 26, 2013.
 - (Vasconcelos 2000) Vasconcelos, M. C. R. L. 2000 University Business *Cooperation in Graduate Studies: Contribution to Learning, Knowledge Management and Innovation in the Mining Industry*. Belo Horizonte: School of Information Science, UFMG, 257p. (Thesis, Doctorate in Information Science).
 - (Vieira et al., 2002) Vieira, A. T.; Almeida, M.E. B.; Alonso, M. (Org.). 2003 Educational management and technologies. São Paulo: Avercamp.