

# INFORMAL LEARNING AT WORK CONTEXT: A META-STUDY OF BRAZILIAN SCIENTIFIC PRODUCTION



TIELE SILVEIRA CARRASCO

Universidade Federal do Rio Grande (FURG), Rio Grande – RS, Brazil.

FRANCIELLE MOLON DA SILVA

Universidade Federal de Pelotas (UFPel), Pelotas – RS, Brazil.

**To cite this paper:** Carrasco, T. S., & Silva, F. M. Informal learning at work context: a meta-study of Brazilian scientific production. *Revista de Administração Mackenzie*, 18(4), 137-163. doi 10.1590/1678-69712017/administracao.v18n4p137-163



## ABSTRACT

**Purpose:** This study aimed at analyzing Brazilian scientific production about informal learning at work context in journals of Administration.

**Originality/value:** Especially in Brazil, research on informal learning is featured as shallow, scattered type. Therefore this is a latent topic in the field of organizational learning. The aim, thus, is providing contribution to the characterization of this subject, indicating gaps and research possibilities from national scientific production.

**Design/methodology/approach:** a meta-study analyzing a set of 36 studies published in Business journals was developed for this purpose, with no initial time delimitation until 2016.

**Findings:** Results obtained indicated a slow increase on publications about informal learning since 2010. It can be inferred that researches aiming specifically at informal learning still occupy a small backward space highlighted by the investigation of how learning processes take place, mostly by means of qualitative researches, in a clear attempt to comprehending such phenomenon.

## KEYWORDS

Informal Learning. Organizational learning. Meta-study. Mapping. Systematic review.

## 1. INTRODUCTION

Scientific production on Organizational Learning (OL) has considerably in the past years, propelling the volume of publications and, thus, uncovering other possibilities in this field of study (Godoy & Antonello, 2011). One of these latent dimensions which are catching academics interest on Business issues is Informal Learning at work context.



Informal learning actions at work concern the search for new knowledges, abilities, and acts by the individual in a non-planned or structured way, emerging from the interaction between individuals and the context (Flach & Antonello, 2010), either in the addressing of a given demand or need related to his/her tasks, trying to clear a doubt with a more experienced workmate about a work-related issue, accessing the instruction manuals and documents of the Organization, or even by observation, among other related actions (Coelho Junior & Mourão, 2011).

In one hand, it can be stated that researches about learning faced some advance in function of the pressures and uncertainties of the current competitive scenario (Closs & Antonello, 2011), which require more effort from Organizations as to guarantee their success and survival. In face of such scenario companies must promote continuous team learning and a systemic thinking because the source of fundamental wealth relies on learning (Santos & Franco, 2011). Then learning poses as a relevant item while learning time became constant and thinking, questioning, imagination, and creativity are currently essential (Closs & Antonello, 2010).

On the other hand, the progress of researches on learning aims at fulfilling the scientific will for understanding this phenomenon. However, “in Brazil only scarce investigations are developed about informal learning and the studies are sparse, non-sequential, and diffuse” (Flach & Antonello, 2010, p. 195). The precious character of the research on informal learning was reassured by Reatto and Godoy study (2015) who, when analyzing publications on informal learning, found only 21 papers published on journals classified as *Qualis* B2 or higher by Capes from 2006 through 2012 and concluded that “one can say that the study of Informal Learning in Brazil is still incipient and deserves a more careful look from the Academic world” (p. 85).

Upon that it must be added the ideological prestige of foreigner over national production to this (Misoczky, 2006) and the fact that scientific study of learning sends one to a theoretical framework rooted on Psychology (Moreira, 2011). Even so, learning theories on Business in the Brazilian scenario show an emancipation in the development process of endogenous theories (Nogueira & Odellius, 2015) which is highlighted in the present study.

Given the background, investigating the state of the art of research on Informal Learning on Business by checking the different perspectives used to see this phenomenon and the inquietude, differences, and similarities among studies is relevant for drawing a schedule and gaps for future researches, especially in Brazil, highlighting the importance of a more critical reflection



addressed to “what” and “how” to investigate the issue chosen (Godoy & Antonello, 2011). Then the research problem is presented as: what is the state of the art of Brazilian scientific production on informal learning at work context in Business journals, by means of a meta-study. In these terms, this research is expected to contribute to characterizing this field of study while indicating research possibilities, since “OL constitutes a part of knowledge with no consensus even with regards to the establishment of central, co-linked concepts, resulting in polysemy, conceptual imprecisions, and challenges to be defeated” (Loiola & Leopoldino, 2013, p. 188).

Literature review on informal learning at work context will be presented as follows, along with a resumption of previous studies focusing on analyzing the state of the art of researches on the issue in the Brazilian scenario, sequentially presenting the methodological path for reaching results in the section of methodological procedures, while major findings and their respective analysis are exposed in the section of results and discussion in the final considerations.

## 2. INFORMAL LEARNING AT WORK CONTEXT

Daily practice at work offers a proper environment to the continuous production of collective knowledge. This is a parallel space, unsubordinated to courses and formal institutional activities such as training interventions (Flach & Antonello, 2011). However, even though interlinked and not representing mutually excluding concepts, formal and informal learning present some traces that differ from each other and have to be pointed out.

In their nature, learning actions at work can be either formal: induced, typically institutionally offered by means of learning mechanisms based in the classroom such as training programs, speeches, and courses; or informal: non-systematized, spontaneous, natural, triggered by the interaction among workmates, customers, suppliers, and partners, in which the control of learning relies on the learner (Coelho Junior & Borges-Andrade, 2008; Marsick & Watkins, 2001).

The analysis of specific scientific production on informal learning by means of social interaction, that is, practical learning at organizational context, is proposed in this study (Camillis & Antonello, 2010). That process allows each person in the organization to influence or even change the group functioning from individual actions incorporated to the valid *modus operandi* (Coelho Junior & Mourão, 2011).



Informal learning (IL) at work shelters on the idea of learning as a process by which individuals while associated to other parties commit to a direct, personal meeting and, intentionally, think of how they do validate, change, create meanings, and try to integrate their different types of knowledge (Reatto & Godoy, 2015). Thus, the theory of learning can be seen as a dimension of social practice (Lave & Wenger, 1991) in which learning means taking part in the organization life and work practice (Elkjaer, 2004).

Within this framework, informal learning always invokes the individual and, afterwards, his/her interactions in the levels he/she is inserted in: group, subgroup, organizational, and interorganizational (Antonello & Godoy, 2011). Thus, researches in this area tend to focus on analyzing IL at one of these levels.

Some authors (Antonello, 2011; Didier & Lucena, 2008; Marsick & Watkins, 2011; Lave & Wenger, 1991) take variations on the conceptualization of informal learning into consideration, culminating in the so called situated and incidental learning. As for situated learning knowledge is obtained from practicing, acquired at social context and having the interaction among knowledge, learning, and meanings negotiation as a crucial compound (Antonello, 2011; Lave & Wenger, 1991). Incidental learning, on its turn, is the non-intentional or non-planned learning triggered by observation, repetition, social interaction, and problems solving, which includes learning from mistakes, from doing, from net transmission, learning by means of several interpersonal experiences (Antonello, 2011) and can be defined as a byproduct of some other activity (Marsick & Watkins, 2001).

Besides the complexity of the issue, informal learning is not always seen by people as far it lies on its own practice. So, many times learning processes are hard to be noticed, evaluated, and measured, contributing to a diffuse and rare look over the approach on scientific production, and jeopardizing the consolidation of such field of study, essentially in Brazil (Flach & Antonello, 2010).

## **1.1 Previous studies about scientific production on Learning in Brazil**

Some studies have proposed to analyze academic production on Organizational Learning at work context in Brazil, such as Loiola and Bastos (2003), Antonello and Godoy (2009), and Godoy and Antonello (2011). Focused specifically on Informal Learning only the study by Reatto and Godoy (2015) was found.



Loiola and Bastos (2003), in their study “The Academic Production on Organizational Learning in Brazil”, analyzed full studies published from 1997 to 2001 in the major Business journals, according to Capes *Qualis* rank, and in the annals of two scientific congresses. The Publication of Business Administration (RAE), Publication of Contemporary Business (RAC), Publication of Organizations & Society (O&S), Publication of Business (RAUSP), and the Annals of the Annual Meeting of the National Association of Business Post-Graduating (ENANPAD), and The Business Association of Latin American Studies (BALAS) were analyzed. Regarding the BALAS annals, only the volumes from 1998, 1999, and 2001 were found and checked. In total, 43 studies on organizational learning were found, from which 30, most of them, belonged to ENANPAD, justified by the authors as a factor either of the flexibility of that vehicle or for presenting a larger number of studies published simultaneously. It is important to highlight that, in this study, no study was explicitly categorized either as an investigation on Informal Learning or a sub-theme of the framework used.

Antonello e Godoy have performed a study name “A Brazilian Schedule for the Studies on Organizational Learning” aiming at identifying, describing, and analyzing production in the field of studies on Organizational Learning in Brazil from 2001 through 2005, establishing four magazines and two annals of Business congresses as object of analysis. The magazines analyzed were the Publication of Business Administration (RAE), Publication of Contemporary Business (RAC), Publication of Organizations & Society (O&S), and Publication of Business (RAUSP). The congresses chosen were the National Meeting of Business Post-Graduation Courses (ENANPAD), and the National Meeting of Organizational Studies (ENEO), a methodology similar to that used by Loiola and Bastos (2003). The survey on magazines resulted in 28 papers, while the survey on congresses yielded 66 papers, in a total of 94 ones. The present study did not explore the theme of the studies so that the prevailing theme cannot be identified among them.

Following the same premises and methodological choices as Antonello and Godoy (2009) study, there is also Godoy and Antonello (2011) study named “Mapping of Organizational Learning in Brazil: a multiparadigmatic review” presenting an analysis of studies with the same scope as Antonello and Godoy’s (2009) but expanding the investigation and finding that, from the total 94 papers, 21 have been categorized as studies focused on investigating current formal and informal work practices present in the informal Organization structures, a category in which probably the studies approach informal learning, but not only these ones.



Finally, the study by Reatto and Godoy (2015) is highlighted, proposing the investigation of scientific production on Informal Learning framework specifically in journals ranked as B2 or higher according to Capes rank, from 2006 through 2012. From the 23 journals checked only 8 presented studies on the theme over a total of 21 ones. And, contrary to Godoy and Antonello (2011) who point that studies tend to prefer checking out opportunities, facilitators, and obstacles to Organizational Learning, Reatto and Godoy (2015) found only one study approaching such goal as to IL, suggesting that studies are replacing the literature on learning facilitators and obstacles for a literature that concerns about the way people give a meaning to their experiences at work.

The analysis of these studies point to a background in which research on informal learning in Business is still incipient and lacks reviews about it. Misoczky (2006), supported by Schwarz's (1987) words, states Brazilian production and the intellectual life in Brazil sometimes seem to restart from zero and criticizes the Brazilian hunger for the recent production from developed countries and that, several times, Brazilian researchers show no interest on the work developed by previous generations, causing reflection to be discontinuous.

Thus, in order to make feasible the main goal of this study it will make use of a research which methodological procedures will be explained in the next section.

### 3. METHODOLOGICAL PROCEDURES

Review-type studies have been highly valued for the contribution they can deliver to the development of scientific knowledge as long as they compile and compare the knowledge diffused on several sources, identify specializations and areas of interest, guide efforts to future researches, become a source of consultation, support bibliographic search, inform about correlate fields and multidisciplinary areas, offer feedback by evaluation and criticism from the production analyzed (Reatto & Godoy, 2015).

A systematic review, as well as all other types of review, is a type of research that uses literature about a given theme as source of information. This type of investigation provides an abstract of the evidences related to a specific intervention strategy by means of the adoption of clear, systematic search methods, critical appreciation,



and a summary of the information selected (Sampaio & Mancini, 2007, p. 84).

According to Godoy and Antonello (2011):

Surveys of such nature are particularly important to stimulate researchers thinking by themselves about the challenges and limits surrounding their practice even though they are studies adopting a “look on the field”, restricted to very specific analyses categories (Godoy & Antonello, 2011, p. 52).

So, in order to achieve the aim of this study, which is the analysis of Brazilian scientific production on informal learning at work context in Business journals, the arrangement of methodological path was chosen as shown in Table 01.

Thus, the theme of interest to Informal Learning at work context was defined at Step 1 and, so this study had the purpose of identifying, describing, and analyzing production in the field of studies on Informal Learning in Brazil. As observed by analyzing previous studies, research on Informal Learning in Brazil is scarce, so no start date was established for the begin of searches and studies published until 2016, available on data basis platforms, were checked.

**(Table 1)**

**STEPS OF THE STUDY**

Steps	Tasks Developed
Step I – Base Work	Defining the phenomenon of interest, literature review, and choice of methodological path; Decision about data basis and parameters to be used, and screening;
Step II – Data Analyses	Data encoding and register; Data analysis, description, and presentation;
Step III – Considerations	Data interpretation; Reflection against the knowledge produced and identification of limitations and possibilities of new researches.

Source: Adapted from Godoy and Antonello (2011)





Searches were performed at the Capes Journals Portal because it covers several data bases such as Scopus, Ebsco, Scielo, Web of Science etc. and the Spell Electronic Library. In free search engines, with no initial time delimitation, studies simultaneously presenting the words “learning” and “informal”, and correlates such as “learning” and “situated”, “learning” and “incidental”, “learning” and “experience” or “experiential” both in the title, key-words, or in the abstract.

Results from research areas beyond the interest ones have been excluded, restricting the research to those pertinent to Business knowledge area. Such screening is necessary since the learning theme can be discussed under different perspectives other than the organizational context, such as areas of Education, Psychology, Health, among others. So, using Capes data basis the search reverted with 49 studies while Spell reverted with 31 ones.

After excluding repeated studies among the data bases used and reading studies titles and abstracts aiming at checking the presence of the items found according to the theme, a total of 36 articles was obtained. Putting an end to the basis work regarding Step I, Step II regarding the course of procedures that allowed data analyses was started.

Based on Antonello and Godoy (2009), criteria for analysis of studies were set out and presented on Table 02.

**(Table 2)**  
**CRITERIA FOR ANALYSIS**

Analytical dimensions	Summary tab fields
Identification	Author(s), year, University Title Key-words (main theme of the study) Goal of the study Research focus
Theoretical bases	Learning theoretical bases Main references (national and international – work and author)
Analysis level	Analysis level (individual, group, organizational, or interorganizational)
Type of Research	Research design (according to Gil (2008)) Approach (Qualitative or Quantitative)
Principles found	Main findings / results (relevant aspects)

Source: adapted from Antonello and Godoy (2009)

**(Table 3)**

**DISTRIBUTION OF FREQUENCY OF STUDIES PER PUBLICATIONS AND YEAR**

Publication	Qualis	Year											Total				
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		2015	2016		
Cadernos EBAPE.BR	A2	0	0	0	1	0	0	0	0	2	0	1	0	0	0	0	4
Organizações & Sociedade	A2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
RAE-eletrônica	A2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Revista Brasileira de Gestão de Negócios	A2	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	3
READ.	B1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	4
Revista de Administração Mackenzie	B1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
BASE	B2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Gestão & Regionalidade	B2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Revista de Administração da Unimep	B2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Revista de Ciências da Administração	B2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Revista FACES Journal	B2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
Perspectivas em Gestão & Conhecimento	B3	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	3
Revista Alcance	B3	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2
Revista Capital Científico - Eletrônica	B3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

(continue)

**(Table 3)**  
**DISTRIBUTION OF FREQUENCY OF STUDIES PER PUBLICATIONS AND YEAR**

Publication	Qualis	Year											Total			
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		2015	2016	
Revista de Estratégia & Negócios	B3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Revista de Gestão	B3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Revista de Gestão e Secretariado	B3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Revista Organizações em Contexto	B3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Teoria e Prática em Administração	B3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
GESTÃO.Org	B5	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Revista Administração em Diálogo	B5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Total		2	1	1	4	0	2	3	5	4	2	5	4	3	36	

Source: Elaborated by the authors.

Articles were integrally read in order to enable identifying analytical dimensions and inferences about the set of works selected. So, later, 11 items from the summary tab were set for each study selected, establishing a logical arrangement to the data. Such systematization supplies data synthesis, that is, constitutes a bibliographic portfolio corresponding to a summary of the issue, enabling the meta-study.

Meta-study techniques consisted in the systematization of a set of data obtained from a scientific literature. So, the survey is a product of a logical arrangement of the information described in the bibliographic material previously identified (Brito & Berardi, 2010). Thus, the organized arrangement of the studies selected to the meta-study through the summary tabs allowed condensing information which in turn enabled the critical analysis of evidences and conclusions about sample features (Sampaio & Mancini, 2007).

The meta-study product consisting in presenting the main evidences observed on the studies selected is presented in the section of results. Finally, the so called final step Considerations take place, Step III, consisting of propositions that can be figured out and interpreted according to data collected and the identification of limitations and possibilities for future researches, which are being presented in the section of final considerations.

## 4. RESULTS

As pointed out in the methodological procedures section, a summary of 36 initial time limitation free studies was obtained, thus approaching all studies on Business available in the data bank consulted up to 2016. It was possible to infer some questions from fully reading of the studies and data compilation as well as pointing out the main features of scientific production on informal learning at work context characteristic of this meta-study.

First, date and vehicle of publications was observed, leading to the time distributions per journal presented on Table 3. So it was possible to observe no evident concentration of scientific production on informal learning on a given journal and year, indicating contemporaneity of Flach and Antonello (2010) statement that researches in Brazil can be said to be rare and scarce.

At this point, it is added the fact that the years presenting higher incidence of studies were 2011 and 2014, with 5 (five) studies each, but it cannot be stated they can be taken as peak years of the research because they slightly differ as to other years. The publications with higher concentration of studies on informal learning published were

Electronic Business Publication (ReAd) published by the Business School of Universidade Federal do Rio Grande do Sul, and Books EBAPE.BR sponsored by Brazilian School of State and Private Management of the Fundação Getúlio Vargas, both ranked as Qualis A2.

By analyzing the distribution of studies per year it is seen a slight increase in the researches on this theme in the past 6 (six) years, specially published by ReAd. Such data can represent more interest on research on informal learning in national productions from 2010 on.

A significant amount of the studies (10 out of 36 studies analyzed) were published on publications ranked as more relevant A2 according to Capes Qualis rank and that fact must be added since it can indicate that even being scarce, the works published tend to be satisfactory in quality.

With regards to the authorship of the studies, according to table 04, it was seen that a relevant part of them was written by or in a partnership with Claudia Simone Antonello, a researcher from Universidade Federal do Rio Grande do Sul (UFRGS), followed by studies written by or in a coauthoring with Leonardo Flach, from UFRGS as well. It is important to highlight that they are authors of most researches which major theme is informal learning.

Consequently, the university with highest incidence among the studies analyzed was UFRGS, a very different background comparing to the one presented by Loiola and Bastos (2003), in which Universidade Federal da Bahia (UFBA) posed as the institution with the highest incidence of studies on OL. So one of the possible assumptions is that researchers from UFBA did not guide their studies towards IL.

Still with regards to studies authorship or co-authorship, the names of Arilda Schmidt Godoy, an important researcher in the field of organizational learning, and Catarina Cecilia Odelyus, researcher who advocates the theme of learning related to the development of capabilities, show up.

Researchers Claudia Simone Antonello and Arilda Schmidt Godoy have several important studies on OL, two of them mentioned on section 2.1 Previous studies about scientific production on Informal Learning in Brazil, and the work “Organizational Learning in Brazil” written and arranged by them and launched by Bookman in 2011, is remarkable.

It is believed that the background of most authorships has a relevant impact on the national references used once it is seen the establishment of a knowledge net, boosting the number of Brazilian quotations on publications. Such information can be seen on the most quoted national references, presented on table 05. Presenting the majorly referenced work of each author aiming at highlighting in which theme the references were



mentioned was the choice, while the least recurrent were grouped in category “others”. Frequency considered the number of times the work of the author was shown in the list of references.

**(Table 4)****SAMPLE AUTHOR OR CO-AUTHORS**

Authors or co-authors	Frequency
Claudia Simone Antonello	8
Leonardo Flach	3
Arilda Schmidt Godoy	2
Catarina Cecilia Odelius	2

Source: Elaborated by the authors.

**(Table 5)****MOST USED NATIONAL REFERENCES**

	Works	Frequency	
Antonello, C. S.	(2007). Aprendizagem na Ação Revisitada e sua Relação com a Noção de Competência. <i>Aletheia (ULBRA)</i> , 26 (1), 146-167.	7	31
	(2005). A metamorfose da aprendizagem organizacional: uma revisão crítica. In R.L. Ruas; C.S. Antonello & L.H. Boff (Orgs.). <i>Aprendizagem organizacional e competências</i> (pp. 12-33). Porto Alegre: Artmed.	5	
	(2011). Saberes no singular? Em discussão a falsa fronteira entre Aprendizagem Formal e Informal. In C.S. Antonello & A.S. Godoy, A. S. (Orgs.). <i>Aprendizagem organizacional no Brasil</i> (pp. 225-245). Porto Alegre: Bookman.	4	
	Others	15	
Antonello, C. S.; Godoy, A. S.	(2010). A encruzilhada da aprendizagem organizacional: uma visão multiparadigmática. <i>Revista de Administração Contemporânea</i> , 14(2), 310-332.	6	15
	(2009). Uma agenda brasileira para os estudos em aprendizagem organizacional. <i>Revista de Administração de Empresas</i> , 49(3), 266-281.	5	
	Others	4	

(continue)



(Table 5)

**MOST USED NATIONAL REFERENCES**

	Works	Frequency	
Fleury, A; Fleury, M. T.	(2004). Estratégias empresariais e formação de competências: um quebra-cabeça caleidoscópico da indústria brasileira. São Paulo: Atlas.	8	16
	(2001). Construindo o conceito de competência. <i>Revista de Administração Contemporânea</i> . Edição Especial, 183-196.	4	
	Others	4	

Source: Elaborated by the authors.

As mentioned, enabling the knowledge net comes from the authors themselves who most of the time referenced their own works. Such fact could be seen on Antonello and Godoy works, where the reference of their own works in the studies favors dissemination and contribute to enlarging the reach of their scientific production.

Authors Fleury and Fleury are exponents in Brazilian research on competences, as shown in the designation of their most referenced works in the studies. Thus they were highlighted in the studies on learning and development of abilities.

Although it is observed that Antonello and Godoy along with Fleury and Fleury are the most used national quotations, with a remarkable frequency, there is no diversity, so that national references concentrate only on these authors. Such information is similar to the one found by Godoy and Antonello (2015), revealing some discredit on national production. At that point Misoczky (2006) is recovered, indicating the cult to foreignisms jeopardizes the consolidation and development of the research and projection of national authors.

The most quoted international authors on national works can be seen on table 06. Due to the wide range of authors and related works, only references seen 5 (five) times or more were taken into account and the choice was highlighting the most quoted work of each author since frequency considers all different works of each author used by the publications.

In a broader analysis, disregarding particularities and observing only the use of the most reference works of international authors, it was possible to identify some converging points. For example, in general, Wenger’s (2003) and Lave and Wenger’s (1991) works were referenced specially on inferences



about the idea of practice communities, situated learning, participation of the players in learning process and phenomena related to group learning.

**(Table 6)****MOST USED INTERNATIONAL REFERENCES**

	Most referenced work	Frequency
Wenger, E.	(2003). Communities of Practice and Social Learning Systems. In D. Nicolini; S. Gherardi, S. & D. Yanow. <i>Knowing Organizations: A Practice-Based Approach</i> . N.Y, Sharpe Ed.	18
Lave, J.; Wenger, E.	(1991). <i>Situated Learning: Legitimate peripheral participation</i> . Cambridge: University of Cambridge Press.	14
Elkjaer, B.	(2004). Organizational learning: the "third way". <i>Management Learning</i> , 35(4), 419-434.	12
Marsick, V.; Watkins, K.	(2001). Informal and Incidental Learning. <i>New Directions for Adult and Continuing Education</i> , 2001(89), 25-34.	12
Nonaka, I.; Takeuchi, H.	(1997). <i>Criação de conhecimento na empresa: como as empresas japonesas geram a dinâmica da inovação</i> . Rio de Janeiro: Campus.	12
Gherardi, S.	(2001) From organizational learning to practice-based knowing. <i>Human Relations</i> , 54(1), 131-139.	11
Senge, P.	(1990). <i>A quinta disciplina</i> . São Paulo: Best Seller.	9
Argyris, C.; Schon, D. A.	(1978) <i>Organizational learning: a theory of action perspective</i> . Workingham: Addison-Wesley.	8
Brown, J.; Duguid, P.	(1991) Organizational learning and communities-of-practice: towards a unified view of working, learning and innovation. <i>Organization Science</i> , 2(1), 40-57.	8
Conlon, T. J.	(2004) A review of informal learning literature, theory and implications for practice in developing global professional competence. <i>Journal of European Industrial Training</i> , 28 (2-4), 283-295.	8
Antonacopoulou, E. P.	(2006). The relationship between individual and organizational learning: new evidence from managerial learning practices. <i>Management Learning</i> , 34, 455-473.	7

*(continue)*



(Table 6)

## MOST USED INTERNATIONAL REFERENCES

	Most referenced work	Frequency
Gherardi, S.; Nicolini, D.; Odella, F.	(1998) Toward a social understanding of how people learn in organizations. <i>Management Learning</i> , 29(3), 273-297.	7
Crossan, M. M.; Lane, H. W.; White, R. E.	(1999) An Organizational Learning framework: from intuition to institution. <i>The Academy of Management Review</i> , 24 (3), 522-537.	6
Gherardi, S.; Nicolini, D.	(2001) The sociological foundations of organizational learning. In M. Dierkes et al. (Orgs.). <i>Handbook of Organizational Learning and Knowledge</i> (pp. 35-60). Oxford: Oxford University Press.	6
Kolb, D.	(1984) <i>Experiential learning: experience as the source of learning and development</i> . New Jersey: Prentice Hall.	6
Marsick, V.	(2009) Toward a unifying framework to support informal learning in theory, research and practice. <i>Journal of Workplace Learning</i> , 21(4), 265-275.	6
Nicolini, D.; Gherardi, S.; Yanow, D.	(2003) Introduction: toward a practice-based view of knowing and learning in organizations. In D. Nicolini; S. Gherardi, S. & D. Yanow. <i>Knowing Organizations: A Practice-Based Approach</i> . N.Y, Sharpe Ed.	6
Cook, S. D. N.; Yanow, D.	(1993) Culture and organizational learning. <i>Journal of Management Inquiry</i> , 2(4), 373-390.	5
Prange, C.	(2001) Aprendizagem organizacional: desesperadamente em busca de teorias. In M. Easterby-Smith et al. (Orgs.) <i>Aprendizagem organizacional e organização de aprendizagem</i> (pp. 41-63). São Paulo: Atlas.	5
Schon, D.	(1983) <i>The reflective practitioner: How professionals think in action</i> . New York: Basic Books.	5

Source: Elaborated by the authors.

Senge (1990), the author of the best-seller “The Fifth Subject” (which reached its 29<sup>th</sup> edition in 2013), is very renowned on Organizations learning theme (OL). Thus, also for its emblematic character, it is mentioned under this perspective or in deliberations related to the theme of mental models existing in the organization.



Nonaka and Takeuchi (1997) are also remarkable authors in international references, mainly in issues related to creating knowledge inside the organization and promoting learning as a determinant of a competitive advantage. Thus, studies looking at bringing learning theme and the search for a better performance and strategic positioning closer use these authors as one of their references.

Also, some authors did not stand out among the most quoted references but must be mentioned for their evident participation in researches on specific themes. They are: Zarifian (2001), mentioned in studies linking learning to the development of abilities, and Weick (1995) in works addressing the making of senses (sensemaking).

The list of top quoted international authors point out names which are similar to those listed by Reatto and Godoy (2015), obviously differing in frequencies. Then, one can consider these are the main international references on organizational and informal learning used in national academic production.

Analyzing studies identification it was shown that the term “informal learning” stood out in the title of 5 (five) studies and is a part of the list of term in the key-words in 9 (nine) ones. On table 07 the sample was ranked according to the study main theme, identified from the full reading of the document.

**(Table 7)**

**FREQUENCY-BASED DISTRIBUTION OF STUDIES  
ACCORDING TO PREVALENT THEME**

Prevalent theme	Frequency
Organizational Learning	17
Informal Learning	7
Tangentials to learning	5
Management skills	4
Practice communities	2
Interorganizational learning	1
Total	36

Source: Elaborated by the authors.

The prevalent theme on the set of publications analyzed is organizational learning and related topics. The works with propositions preferentially related to IL totaled 7 (seven) registers. Tangential themes to succession,



improvisation, cognition and others were taken into account, resulting in total 5 (five) studies. The theme on management skills stands as main basis to 4 (four) issues, supported on the main argument that creating an environment featuring positive manifestations around the stimulation of learning actions from the individual is one of the most important tasks of the manager (Coelho Junior & Borges-Andrade, 2008).

With that ranking of prevalent themes it is observed that, even delimiting research at data bank exclusively by means of the presence of terms “learning” and “informal” and correlates in the abstract, key-words, or title, it was not possible to address only studies showing this prevalent theme, so only 7 (seven) from the 36 studies brought that issue as its main focus. It is explained since informal learning permeates the issues on general learning.

On one hand, informal learning shows up through a protocol quotation in the discussion about organizational learning. On the other hand, it can be said that informal learning shows up arising from the goal of the studies which, mostly, are proposed to investigate the way learning takes place in the investigation foci chosen. So, they end up concluding that informal learning is the prevalent way for learning since refers to a constant process, that is, there is a possibility to full-time knowledge acquirement (Coelho Junior & Borges-Andrade, 2008), since learning is part of human existence and the development of the worker at his social background at work and organization (Reatto & Godoy, 2015). Hence, it is natural and potential that IL happens much more often than other types of learning.

Thus, in general, studies that aim at investigating how learning takes place and what permeates it inside the organization conclude that it is necessary a group initiative from individuals and organizations to trigger the development of organizational learning. People must set forth to the continuous search for knowledge and improvement while organizations must provide an environment proper for learning working as a support to the development of the individuals, as identified by Godoy and Antonello (2011).

The goals of the studies hovered on the line of investigation about learning processes. Those goals aim at fulfilling a gap in research since there are many discrepancies as to what is and how organizational learning happens (Antonello & Camillis, 2010). Further, it relates to the discussion about the incipency of research on learning in Brazil and the level of development of most researches. Under this perspective it is important to highlight the designing and approach of the studies summarized in table 08, which confirm the finding of a said initial phase of thematic researches in Brazilian background.



The foundation for categorizing research designing was studied by Gil (2008). Thus, the works developed from analysis of secondary data such as books and scientific papers were framed as bibliographic research (Gil, 2008). Studies discussing questions with no empirical application, so called theoretical essays, were ranked as qualitative approach bibliographic research and the systematic, bibliometric and similar reviews, as proposed by the simplification of studies and the analyzes of similarities frequency, were classified as quantitative approach bibliographic research (Gil, 2008).

Case studies are those focused on investigating a given phenomenon within a given context, being either qualitative or quantitative in their approach (Gil, 2008). In this case, most case studies (9) were qualitative approach type and only 1 (one) applied a quali-quantitative approach, that is, made use of both approaches, corresponding to two steps of the study. Field studies are those set to deepen the questions presented and, therefore, qualitative approach type, corresponding to the larger part of the sample, with 14 studies.

As field survey were categorized the studies featured by the direct questioning to a significant group of people whose behavior was intended to be known, followed by a quantitative analysis (Gil, 2008). However, even if redundantly, the option was evidencing the approach as quantitative.

### (Table 8)

#### FREQUENCY-BASED DISTRIBUTION OF STUDIES ACCORDING TO RESEARCH DESIGNING AND APPROACH

Research designing	Approach	Frequency	Total
Bibliographic research	Qualitative	6	8
	Quantitative	2	
Case study	Qualitative	9	10
	Quali-quantitative	1	
Field survey	Qualitative	14	14
	Quantitative	4	4

Source: Elaborated by the authors.

Qualitative approach is the one of choice, mostly due to the need for understanding the processes and whatever permeates them. Besides the prosaic verbs “to analyze” and “to identify” when mentioning the objectives,



the verb “to comprehend” was used a lot. All qualitative approach case studies and field studies made use of deep interviews and some added the documental analysis or non-participating observation to them.

As observed, informal learning was not the main goal of most studies as for the 4 (four) studies of quantitative approach field surveys, which used a survey-type research. Their aim was identifying the most used types of organizational learning and those that influenced the most the development of skills once again obtaining informal learning as one of the most evidenced ways of learning in learning processes as a result. It confirms the statements of Flach and Antonello (2010) that informal learning consists in its own practice.

There were several foci of empirical investigation, both in qualitative and quantitative approach researches, indicating that theme has great scope and application. However, besides presenting informal learning as a prevalent way for spreading knowledge and developing skills, results were scarce, as well as those reported in Godoy and Antonello (2011), lacking empiric investigations, making it difficult to identify complimentary results or to compare results.

Approaching learning as a theme implies trying to understand how people, both individual and collectively, decide and act when facing daily challenges that occur during their work activities (Antonello & Godoy, 2009). Thus, given the relevance of analyzing learning level, it was identified that studies prevalently checked for individual level as shown on table 09.

**(Table 9)**

**STUDY LEVEL ANALYSIS**

Analysis level	Frequency
Individual	18
Group	3
Organizational	7
Interorganizational	2
Individual and group	1
Individual and interorganizational	2
Non identified	3
Total	36

Source: Elaborated by the authors.



Such prevalence of studies at individual and organizational level despite the researches focused at the role of group, interorganizational, and societal level fills in the gap identified by Antonello and Godoy (2009).

In face of the exposed, the propositions and reflections according to the information obtained and previously presented, the identification of limitations, and possibilities of future researches defined as Step III of the study, interorganizational are presented in the following section.

## 5. FINAL CONSIDERATIONS

The present study aimed at analyzing the state of art of Brazilian scientific production on informal learning at work context. For this purpose, searches on Capes data basis and Spell electronic library resulted in a framework of 36 studies with no initial time delimitation and, therefore, containing works available in online databank platforms until 2016.

So, after appropriating the works, this study allowed identifying that within the field of organizational learning research, informal learning still has limited space marked by the investigation of how learning processes take place, in a clear attempt to understand this phenomenon.

In a general way researches are supported on foreigner referentials, a common feature of Brazilian studies, greatly due to the requirements of national journals, impacting significantly the list of national most referenced works. At this point it is believed that this fact slows down national production and, somehow, puts a limit on the projection of major national authors. As no changes are seen concerning international works quoted between the present study and Reatto and Godoy's (2015), for example, it can be inferred some austerity of the theoretical bases used in the discussion about learning, which remain basically unchanged across time.

The distribution of studies on publications and time showed no periods or publications with a concentration of studies. However it can be seen that researches show a slight increase in the past 6 (six) years and permeate, also, among larger reach vehicles, calling for their quality.

The material is poor in methodological diversity, especially as to approach type, which was prevalently qualitative. It was also remarked that a noticeable part of the production involving learning as a theme chooses investigation at individual level.

In several studies IL is an issue that emerges from studies investigating organizational learning. Usually the studies intend to identify the way



learning takes place and the most prevalent type of learning, when IL stands out. It indicates a prevalence of interaction processes among individuals and, therefore, IL itself, which not absolutely indicates greater importance of it over formal learning.

In some studies it was noticed that the main theme is not shown on the key-words. So, as a contribution to other studies, it is suggested to give some attention to this item, since key-words are important in helping searches on productions.

Even though this study aimed at embracing as many publications available and main Business magazines as possible, it is evident that one of the limitations of this study is still the choice for a databank, which can have influenced the results. As positive points it can be mentioned the time coverage of the study and a close analysis of the studies, aiming at exploring their peculiarities and similarities. Thus the impossibility of wider findings and comparison happened as shown, due to the profile of the production analyzed.

From the inferences in this study it is believed that the main feature of Brazilian scientific production on informal learning is the initial stage of researches, under development. IL theme is a field of study facing several difficulties on approach and analysis, much of this due to the complexity of the phenomenon itself, consequently the discussion of IL as a goal and not as inherent part of learning process is rare and shattered. Under this perspective there is little attention to the identification of the elements that make easy or inhibit such learning, since the same element can play both a propelling force as an inhibitory one depending on the characteristic of the individuals and organizations. So this is another complex point: which characteristics on individuals and organizations can trigger learning and how they related to each other. Therefore it is believed that investigation within IL still must increase a lot, while representing a challenge to researchers.

Finally then, as a suggestion for future studies, besides the will for new researches on informal learning and advances on methodological procedures, analyses focused on investigating the group, interorganizational, and societal levels are proposed. Besides that, for studies with the same intention of performing a meta-study on the theme, it is suggested to include in the analysis the works from other areas of knowledge, which can add more diversity and depth to the analysis of the state of arte and open greater possibilities of relations.

# APRENDIZAGEM INFORMAL NO CONTEXTO DE TRABALHO: UM META-ESTUDO DA PRODUÇÃO CIENTÍFICA BRASILEIRA

## RESUMO

**Objetivo:** O objetivo deste estudo é analisar a produção científica brasileira sobre aprendizagem informal no contexto de trabalho nos periódicos da área de Administração.

**Originalidade/Lacuna/Relevância/Implicações:** As pesquisas sobre a aprendizagem informal são, especialmente no Brasil, caracterizadas como rasas e dispersas. Logo, esta é uma temática latente dentro das pesquisas sobre aprendizagem organizacional. Assim, a intenção é contribuir com a caracterização desse tema, indicando lacunas e possibilidades de pesquisa, a partir da produção científica nacional.

**Principais aspectos metodológicos:** Para tanto, utilizou-se de um meta-estudo, analisando um conjunto de 36 artigos publicados em periódicos na área de Administração, sem delimitação temporal inicial até o ano de 2016.

**Síntese dos principais resultados:** Os resultados obtidos indicaram que as publicações na temática da aprendizagem informal tiveram leve crescimento a partir de 2010. Pode-se inferir que as pesquisas que tem como objetivo principal a investigação sobre a aprendizagem informal ainda tem um espaço tímido, marcado pela investigação de como os processos de aprendizagem acontecem, predominantemente por meio de pesquisas qualitativas, em uma tentativa clara de compreensão sobre esse fenômeno.

**Principais considerações/conclusões:** As pesquisas sobre Aprendizagem Informal encontram-se em fase de exploração e compreensão acerca dos fenômenos que a constituem e circundam. Portanto, acredita-se que a investigação dentro da Aprendizagem Informal tenha muito a crescer, ao mesmo tempo que representa um desafio aos pesquisadores.

## PALAVRAS-CHAVE

Aprendizagem informal. Aprendizagem organizacional. Meta-estudo. Mapeamento. Revisão sistemática.



## REFERENCES

- Antonello, C. S. (2011). Contextos do Saber: a aprendizagem informal. In C. S. Antonello & A. S. Godoy (Orgs.). *Aprendizagem Organizacional no Brasil* (pp. 139-159). Porto Alegre: Bookman.
- Antonello, C. S., & Godoy, A. S. (2009). Uma agenda brasileira para os estudos em aprendizagem organizacional. *Revista de Administração de Empresas*, 49(3), 266-281. doi <http://dx.doi.org/10.1590/S0034-75902009000300003>
- Brito, R. P., & Berardi, P. C. (2010). Vantagem competitiva na gestão sustentável da cadeia de suprimentos: um metaestudo. *Revista de Administração de Empresas*, 50(2), 155-169. doi <http://dx.doi.org/10.1590/S0034-75902010000200003>
- Camillis, P. K., & Antonello, C. S. (2010). Um estudo sobre os processos de aprendizagem dos trabalhadores que não exercem função gerencial. *Revista de administração Mackenzie*, 11(2), 4-42. doi <http://dx.doi.org/10.1590/S1678-69712010000200002>
- Closs, L. Q., & Antonello, C. S. (2010). Aprendizagem transformadora: a reflexão crítica na formação gerencial. *Cadernos EBAPE. BR*, 8(1), 20-37. doi <http://dx.doi.org/10.1590/S1679-39512010000100003>
- Closs, L. Q., & Antonello, C. S. (2011). Ampliando as fronteiras da educação gerencial: é possível uma reflexão crítica? In C. S. Antonello & A. S. Godoy (Orgs.). *Aprendizagem organizacional no Brasil* (pp. 399-439). Porto Alegre: Bookman.
- Coelho Junior, F. A., & Borges-Andrade, J. E. (2008) Uso do conceito de aprendizagem em estudos relacionados ao trabalho e organizações. *Paidéia*, 18(40), 221-234. doi <http://dx.doi.org/10.1590/S0103-863X2008000200002>
- Coelho Junior, F. A., & Mourão, L. (2011). Suporte à aprendizagem informal no trabalho: uma proposta de articulação conceitual. *Revista de Administração da Mackenzie*, 12(6), 224-253. doi <http://dx.doi.org/10.1590/S1678-69712011000600010>
- Didier, J. M. O. L., & Lucena, E. A. (2008). Aprendizagem de praticantes da estratégia: contribuições da aprendizagem situada e da aprendizagem pela experiência. *Organizações & Sociedade*, 15(44), 129-148. doi <http://dx.doi.org/10.1590/S1984-92302008000100007>



- Elkjaer, B. (2004). Organizational learning: the “third way”. *Management Learning*, 35(4), 419-434. doi <http://dx.doi.org/10.1177/1350507604048271>
- Flach, L., & Antonello, C. S. (2010). A Teoria sobre Aprendizagem Informal e suas implicações nas organizações. *Revista eletrônica de Gestão Organizacional*, 8(2), 193-208.
- Flach, L., & Antonello, C. S. (2011). Organizações culturais e a aprendizagem baseada em práticas. *Cadernos EBAPE. BR*, 9(1), 155-175. doi <http://dx.doi.org/10.1590/S1679-39512011000100010>
- Gil, A. C. (2008). *Métodos e técnicas de pesquisa social*. São Paulo: Atlas.
- Godoy, A. S., & Antonello, C. S. (2011). Cartografia da Aprendizagem Organizacional no Brasil. In C. S. Antonello & A. S. Godoy (Orgs.). *Aprendizagem organizacional no Brasil* (pp. 51-77). Porto Alegre: Bookman.
- Lave, J., & Wenger, E. (1991). *Situated Learning. Legitimate peripheral participation*. Cambridge: University of Cambridge Press. doi <http://dx.doi.org/10.1017/CBO9780511815355>
- Loiola, E., & Bastos, A. V. B. (2003). A Produção Acadêmica sobre Aprendizagem Organizacional no Brasil. *Revista de Administração Contemporânea*, 7(3), 181-201. doi <http://dx.doi.org/10.1590/S1415-6552003000300010>
- Loiola, E., & Leopoldino, C. (2013). Aprendizagem Organizacional e Desempenho: O Que Podemos Aprender dessa Relação? *Revista Psicologia: Organizações e Trabalho*, 13(2), 187-202.
- Marsick, V., & Watkins, K. (2001). Informal and Incidental Learning. *New Directions for Adult and Continuing Education*, 2001(89), 25-34. doi <http://dx.doi.org/10.1002/ace.5>
- Misoczky, M. C. (2006). Sobre o centro, a crítica e a busca da liberdade na práxis acadêmica. *Cadernos EBAPE. BR*. 4(3), 1-13. doi <http://dx.doi.org/10.1590/S1679-39512006000300002>
- Moreira, M. A (2011). *Teorias de Aprendizagem*. São Paulo: EPU.
- Nogueira, R.A., & Odellius, C.C (2015). Aprendizagem: Evolução no contexto das teorias organizacionais. *Perspectivas em Gestão & Conhecimento*, 5(1), 3-18.
- Nonaka, I., & Takeuchi, H. (1997). *Criação de conhecimento na empresa: como as empresas japonesas geram a dinâmica da inovação*. Rio de Janeiro: Campus.
- Reatto, D., & Godoy, A. S. (2015). A produção sobre aprendizagem informal nas organizações no Brasil: mapeando o terreno e rastreando possibilidades futuras. *Revista Eletrônica de Administração*, 80(1), 57-88. doi <http://dx.doi.org/10.1590/1413-2311.0102014.47369>



Sampaio, R.F., & Mancini, M.C. (2007). Estudos de revisão sistemática: um guia para síntese criteriosa da evidência científica. *Revista brasileira de fisioterapia*, 11(1), 83-89. doi <http://dx.doi.org/10.1590/S1413-35552007000100013>

Santos, J. N., & Franco, J. H. S. (2011). Uma possível relação entre trabalho em equipe e aprendizagem organizacional. *Revista de Administração FACES Journal*, 11(4), 190-206.

Senge, P. (1990). *A quinta disciplina*. São Paulo: Best Seller.

Weick, K. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.

Wenger, E. (2003). Communities of Practice and Social Learning Systems. In D. Nicolini, S. Gherardi & D. Yanow (Eds.). *Knowing Organizations: A Practice-Based Approach* (pp. 76-99). New York: M. E. Sharpe.

Zarifian, P. (2001). *Objetivo competência: por uma nova lógica*. São Paulo: Atlas.

## ABOUT THE AUTHORS

### TIELE SILVEIRA CARRASCO

Master's degree student from Department of Economics, Business and Accounting, Universidade Federal do Rio Grande (FURG).

Rua Gonçalves Chaves, 3218, Pelotas – RS – Brasil – CEP 96015-560

*E-mail:* tielecarrasco@gmail.com

### FRANCIELLE MOLON DA SILVA

PhD in Business Administration from the Business School, Universidade Federal do Rio Grande (FURG).

Professor at the Department of Business Administration, Universidade Federal de Pelotas (UFPel).

Gomes Carneiro, 01 – Pelotas – RS – Brasil – CEP 96010-610

*E-mail:* franmolon@yahoo.com.br