PRÁTICAS EDUCATIVAS, MEMÓRIAS E ORALIDADES

Rev.Pemo – Revista do PEMO

Geographic Literacy in Early Childhood Education: absences in the BNCC and Their Interference in geography learning

ARTICLE

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Abstract
Geography, along with other sciences, should be addressed from early childhood education onwards, aiming for the holistic development of students. Within this perspective arises the need to investigate how the process of geographical literacy occurs in early childhood education according to the guidelines of the National Common Curricular Base (BNCC), in order to answer the following main question: do the absences in the BNCC regarding the process of geographical literacy interfere with the teaching-learning process of Geography in elementary education? To address this, a qualitative research was conducted based on the study of the BNCC, which preliminarily showed that it does not advocate any literacy process directly, much less geographical literacy, and that this absence has consequences in the teaching-learning process of Geography in elementary education.
Keywords: Geographic Literacy. Early Childhood Education. BNCC.

Alfabetização Geográfica na Educação Infantil: ausências na BNCC e suas interferências na aprendizagem da Geografia

Resumo
A Geografia, bem como as demais ciências, devem ser trabalhadas desde a educação infantil, na busca da construção integral dos alunos. Dentro desta perspectiva surge a necessidade de se investigar como acontece o processo de alfabetização geográfica na educação infantil a partir das orientações da Base Nacional Comum Curricular (BNCC), no intuito de responder a seguinte questão principal: as ausências na BNCC referente ao processo de alfabetização geográfica interferem no processo de ensino aprendizagem da Geografia no ensino fundamental? E para isso, foi realizada uma pesquisa qualitativa, com base no estudo da BNCC que demonstrou, preliminarmente, que a mesma não preconiza nenhum processo de alfabetização de forma direta, nem tão pouco a geográfica, e que essa ausência traz consequências no processo de ensino-aprendizagem da Geografia no ensino fundamental.
Palavras-chave: Alfabetização Geográfica. Educação Infantil. BNCC.

1 Introduction

Rev. Pemo, Fortaleza, v. 6, e10985, 2024
DOI: https://doi.org/10.47149/pemo.v6.e10985
https://revistas.uece.br/index.php/revpemo
ISSN: 2675-519X

Geography aims to study the transformations of space, dialectical relationships and changes that occur in the global context, within a broad and complex process that involves political, economic, social, environmental and cultural transformations.

Geographic space is the object of study of Geography, a reflection of man's action on nature, according to its historical, technological and cultural evolution. Milton Santos (1996, p. 51) defines geographical space as an "[...] inseparable, solidary and also contradictory set of systems of objects and systems of actions, not considered in isolation, but as the unique framework in which history takes place".

When brought into school education, Geography focuses on providing students with an analysis of the geographical space through geographical categories (landscape, territory, place, local and global) based on an approximation with their reality, an understanding of it and the different forms of intervention. This process allows students to visualize their place in the local context, enabling them to understand the regional, national and global context. It is also important to point out that geographical phenomena can be analyzed in conjunction and on different scales, which means analyzing them conceptually in terms of various social practices and representations (Castellar, 2005).

All of these reflections go against the idea of many laypeople who treat Geography as an area of school knowledge whose aim is only to provide information, without the need to develop strategic reasoning in order to learn it (Castellar, 2005).

There is a deep-rooted culture in everyday school life in the early years that students are prepared to pass if they are proficient in reading and writing, with literacy being focused on Portuguese and Mathematics. This results in a process of curricular subversion, where the centrality of the curriculum options is focused only on the evaluative objects of these large-scale tests, causing a real "curricular narrowing" (Freitas, 2013). These external tests corroborate this context, such as Provinha Brasil[1], which aims to carry out a

[1]Provinha Brasil is a diagnostic assessment of literacy and literacy skills in Portuguese and mathematics developed by children enrolled in the second year of elementary school in public schools across the country.

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https://revistas.uece.br/index.php/revpemo
ISSN: 2675-519X

diagnostic assessment of skills related to literacy and literacy in Portuguese Language and Mathematics.

All the other areas of knowledge end up being left in the background, with their classes replaced by Portuguese and Math classes, due to the need to overcome these contents, which will be assessed externally. In this context, geographic literacy is overlooked. The contents are still disconnected, leave gaps in a reality far removed from current discussions, and there is a regression in learning in Geography and History, as well as in the methodologies adopted.

Much has been discussed about the teaching of geography during elementary school and the importance of the process of geographic literacy, based on the National Curriculum Parameters for Geography (Brazil, 1997) for the early grades. These parameters address the importance of geographical concepts (place, landscape, territory and geographical space itself) based on students' experiences.

This process, presented as geographic literacy by some authors (Castrogiovanni, 2003; Castellar, 2010), actually begins in the first phase of early childhood education, from 0 to 3 years old. In this process, it is necessary for teachers to have basic training to deal with the development of these young learners, in the sense of recognizing "[...] children as active, creative subjects, capable of interactions and whose main way of relating to others and the world is through play [...]" (Silva, 2016, p. 60).

It is necessary to bring children into contact with systematized education at an increasingly early age. In this way, from the earliest years of life, they can appropriate the knowledge historically produced by men and thus fully develop their human capacities and individuality (Malanchen; Oliveira, 2022).

From this perspective, this work seeks to investigate the role of geographic literacy in early childhood education, based on an observation of how the National Common Core Curriculum (BNCC) is structured, in order to answer the following question: do the

The test is administered at the beginning and end of the school year in order to diagnose and measure the progress of students' learning.

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https://revistas.uece.br/index.php/revpemo
ISSN: 2675-519X

absences in the BNCC regarding the process of geographic literacy interfere in the process of teaching and learning geography in elementary school?

To this end, a qualitative, document-based study was carried out, focusing on the BNCC. Bibliographic research on geographic literacy was used as a basis for investigating the process in early childhood education and, in order to answer the questions raised, this article was organized into three parts: the first refers to a discussion about geographic/cartographic literacy, aiming to conceptualize and differentiate them; the second addresses the stages of geographic literacy in early childhood education, and the third presents the BNCC, its structuring for early childhood education and the supposed gaps in the geographic literacy process.

2 Cartographic/Geographic Literacy

Literacy, according to the Aurélio dictionary, is teaching how to read. For Ferreira (2010), literacy goes beyond the technique of reading and writing. In the case of Geography, literacy means creating the conditions for children to read their lived space and, over time, the geographical space within its multiple scales.

In everyday activities, such as the simple act of indicating where you are turning in, it can be seen that most people are not geographically literate. According to Castrogiovanni (2003), research shows that among the teachers who work in the early years there are a large number who are not geographically literate. This is reflected in the children they train, who reach the sixth year of elementary school without having built up the conceptual notions and elaborations that comprise the literacy process.

For Castrogiovanni (2006), literacy is directly related to the student's life and living space, which is constructed by them. He believes in literacy as thinking and acting on the context. Literacy for the world, as defended by the author, is related to thinking and acting on a context and is justified through the prior knowledge that the student brings. From this perspective, the author reaffirms the need for cartographic literacy in an interdisciplinary context, starting in kindergarten and continuing into elementary school.

Castellar and Vilhena (2010) begin their discussion on geography teaching by addressing the need for geographic education, moving on to a debate on geographic literacy and arriving at the idea of geographic literacy. According to the authors, the role of geography education is to help students recognize social action and the dynamics of nature that occur at different historical moments. Considering that life in society is dynamic and the geographical space absorbs the contradictions promoted by innovations in information and technology, which imply changes in the behavior and culture of different places.

In order to achieve the geographical education needed to understand the world, it is necessary to formulate hypotheses based on observations, for subsequent verification and analysis. The fundamental step in the analysis process is to have scientific practice articulated with theoretical development, in other words, the practical pedagogical dimension and the epistemology of geographical science (Castellar; Vilhena, 2010).

There are, however, theorists responsible for the emergence of school cartography research in Brazil and for the concepts of cartographic and geographic literacy, which have contributed to strengthening this area of knowledge.

Oliveira (1978) emphasized the need to teach cartography to schoolchildren, including the teaching-learning process of maps in school curricula and programs.

Soon after, in 1982, Tomoko Lyda Paganelli used Piaget's studies in her master's dissertation to understand the representation of space, analyzing the role of perception and locomotion in the lived space in the process of operationalizing spatial relations, contributing from Piaget's contribution in "The representation of space in children", to the diagnosis of the type of knowledge and mastery of space by children in each age group (Paganelli, 2011).

Maria Elena Ramos Simielli's research focused on understanding the map as a means of communication based on the theory of cartographic communication, seeking to bring maps closer to geographical content (Simielli, 1986). Her later research prioritized the investigation of cartography in school literacy, focusing on the process of acquiring the elements of cartographic language. To this end, the author emphasizes that before reading

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ISSN: 2675-519X

and interpreting a map, it is necessary to understand the process of producing a cartographic product (Simielli, 1997, 1999, 2011).

In the 1990s, Elza Yazuko Passini, in her master's thesis, investigated how perception and representation were present in elementary school geography textbooks, using Jean Piaget's theoretical foundations, with a focus on the use of maps. Later, in her doctorate, Passini, still using the contribution of Piaget (2008), broadened her range of discussions of school cartography beyond maps (Passini, 2011).

Sônia Maria Vanzella Castellar has also dedicated her academic life to unraveling school cartography. Her master's thesis researched the distinction between word/object and the representation of geographical space in the final years of elementary school, and in her doctorate she investigated the notions of space and cartographic representation in elementary school.

All this research has been responsible for advances in educational legislation on the teaching of geography, cartographic language, spatial thinking and geographic reasoning. They allow us to understand that the process of teaching and learning geography is related to the implementation of the process of geographic literacy, which has its process of implementation in Early Childhood Education so that the continuity of learning is established.

2.1 The importance of geographic literacy in early childhood education

Malanchen and Oliveira (2022) defend the thesis that historical-critical[2] pedagogy is a concrete possibility for pedagogical work and for teaching geography in early childhood education. This reflection contributes to the possibility of understanding the contradictions

[2] According to Dermeval Saviani (1984), Historical-Critical Pedagogy is based on the proposal to contextualize systematized knowledge to the reality of social practice, aiming to work on systematized knowledge by transforming it into meaningful knowledge so that, in the process of transmission and assimilation, the student is able to make relevant connections between the various disciplines and the contextual reality to which they belong, understanding knowledge as historically elaborated.

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ISSN: 2675-519X

that generated the concrete reality from the socialization of knowledge, going beyond a theory for education.

In understanding the teaching of geography in relation to the relationships that are established in the geographical space as a social instance, which is contradictory and is established based on the transformations brought about by the techniques developed over time and by changes in society, the form proposed by historical-critical pedagogy of transmitting knowledge, valuing access to knowledge and its understanding, is in line with the way in which geography needs to be taught.

In addition, the association between historical-critical pedagogy and cultural-historical psychology[3] allows us to reflect on how important it is, within the organization of educational work, to systematize content in different stages, considering how they relate, in addition to respecting the content that needs to be worked on at each specific stage.

This same association goes hand in hand with the process of geographical education, which seeks to contribute to the formation of the concept of identity, expressed in different ways:

> [...] in the awareness that we are subjects of history; in the relationships with lived places (including production relationships); in the customs that rescue our social memory; in the identification and comparison between values and periods that explain our cultural identity; in the perceptive understanding of the landscape that gains meaning as, when observing it, one notices the experience of individuals (Castellar; Vilhena, 2010, p. 15).

Geographical education will only be established if the previous stages have been consolidated. In order to do this, it is necessary to understand that the notions of space and time occur in children through the internal organization of movements and corporeality, a process that begins in the mother's womb and is consolidated in daily activities as the baby evolves over the years.

[3] Historical-Cultural Psychology, also known as Historical-Cultural Theory or the Historical-Cultural Approach, is a branch of psychology based on the ideas of Russian psychologist Lev Vygotsky and his followers. This approach highlights the importance of the historical and cultural context in human development, emphasizing that the human mind is shaped by social interactions and cultural practices.

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These reflections lead us to understand that geographical knowledge is built from the first days of life, and that it is necessary for the early childhood education curriculum to present the stages and systematized content for each stage of development. In addition, it is essential that the curriculum document is alive, dynamic and authorial, specific to each location in which it is inserted, much more than a bureaucratic list of skills and competencies.

Considering this process, it is necessary to break the paradigm that the process of geographic literacy only begins in elementary school. According to Ferreira (2010), children start learning mathematical notions before school, just like learning to write, and the process of learning spatial relationships is no different.

First of all, it is important to understand that the process of building spatial relationships takes place from the first movements in the mother's womb and is consolidated until the beginning of what we call geographic literacy, which precedes the teaching of geography. In order for this process to be consolidated, Pedagogy curricula need to include in their content the necessary stages for implementing the process of geographic literacy from early childhood education.

3 Stages of Geographical Literacy in Early Childhood Education and their continuity: a necessary condition for establishing Geography teaching

The process of establishing spatial relationships doesn't begin in school and it doesn't begin with school literacy. It is a process that begins in the mother's womb and develops throughout the child's life. The acquisition of spatial notions begins outside the school institution, well before literacy, and must be well conducted in school, and by school, from early childhood onwards.

Piaget, in his work (1993), reinforces this idea when he states that knowledge is built by individuals from birth and that children go through different stages of development that need to be respected, and it is not acceptable to subject them to knowledge that is not in line with their capabilities (Carneiro, 2017). Ferreiro (1999, p. 47) states that "[...] literacy

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ISSN: 2675-519X

is not a state that is reached, but a process that begins in most cases before school and does not end when elementary school is finished".

From the mother's womb, children already establish spatial relationships (Tuan, 2012), and from the first few months of life, human beings develop their impressions and perceptions of the spatial domain, a condition developed through their interaction with the environment (Almeida, Passini, 2013).

From the basic care that the baby receives, such as feeding, changing diapers, bathing and even daily cuddling, the process of learning space is established. This leads us to reflect that the conception of the notion of space begins before the child's schooling period, which in Brazil starts at around the age of 4, in accordance with the compulsory nature of the law, and it is important to consider that children already attend nurseries before this period.

The school is the place where spatial learning should take place, aimed at understanding the ways in which society organizes its space (Almeida, Passini, 2013), but this stage of spatial mastery can only take place if the pre-learning of references and categories that are essential to the process of conceiving space has taken place.

Considering the Piagetian theory of the stages of development[4] and the mental development of the spatial notion, which includes perception and spatial representation, we can highlight the work of Lívia de Oliveira (1978), Tomoko Lyda Paganelli (1982), Rosângela Doin de Almeida (1994) and Elza Yazuko Passini (1996).

In the first moment of awareness of the space occupied by one's own body, there are two essential aspects, according to Almeida; Passini (2013): 1) body schema and 2) laterality. The child's body schema consists of immediate knowledge of the body both in movement and at rest, the interrelationship of its parts and, above all, its relationship with space and the objects that surround it. This process is slow and takes place as a result of

[4] We're not going to go into the possible mishaps of Piaget's theory and its "biological-etaphysical" character here, as it's not the focus of our text. However, it's important to consider that, for our purposes, the Swiss author's contribution is fundamental and widely recognized throughout the world (Becker, 2010).

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ISSN: 2675-519X

the maturation of the nervous system, the self-world relationship and the child's representation of themselves and the world in relation to them (Almeida, Passini, 2013).

The child's growth, motor evolution and psychological development lead to a new conception of space, which will now be the reconstruction of adults' own space, focused on external space, such as furniture, houses, streets, squares, fields and buildings. This reconstruction will initially take place on the basis of their own dimensions and their ability to perceive it, through the adaptation of the transformative imagination of things (Almeida, Passini, 2013).

Another aspect relating to the initial awareness of space refers to laterality, as we are always focused on the predominance of one side of the body, be it the eye, the hand, the leg or the foot, even without knowing it. Laterality is necessary for children to become aware of whether their side predominates to the left or to the right (Almeida, Passini, 2013).

This whole process takes place between the ages of 5 and 7, when children gradually become aware of their bodies and their distinct parts, and identify them. Just as the psychogenesis of written language (Ferreira and Teberosky, 1985) is associated with evolutionary levels, in which the student goes through levels, categories and sub-levels, the process of acquiring the notion of space also goes through stages of evolution.

The origin of the acquisition of the notion of space, called the psychogenesis of the notion of space, which, according to Almeida; Passini (2013), takes place from the establishment of three fundamental stages in the construction of knowledge: Experienced Space, Perceived Space and Conceived Space, each of which is associated with a stage in the child's development (Chart 01).

We can say that the psychogenesis of the spatial notion is the first stage necessary for the process of geographic literacy to be established. The learner develops a system of spatial representations through a constructive process, there is a regular progression in the problems they face in space and their solutions, they begin to demystify the nature of spaces and begin to differentiate between them, which happens gradually and continuously, as we can summarize in Chart 01:

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ISSN: 2675-519X

Chart 01 - Stages in the psychogenesis of spatial notion

Psychogenesis of Spatial Notion		
Type of representation	**Características**	**Estágios de desenvolvimento cognitivo**
Lived Space	It refers to physical space, experienced through movement and displacement, and the child begins to understand it through play or in other ways by walking through it, delimiting it or organizing it according to their interests. Rhythmic and psychomotor exercises are important at this stage because it is through exploring with their own bodies that children define dimensions and spatial relationships.	Sensorimotor (0 to 2 years) Pre-operational (2 to 7 years)
Perceived Space	This refers to space that doesn't need to be physically experienced. At this stage, the child is already able to remember the elements that make up their route from school to home, as well as distinguishing distances and the location of objects in a photo. This is built through direct contact with the object, in other words, through the senses. At this point, the teaching of Geography in the early grades of elementary school begins.	Concrete operations (7 to 12 years)
Conceived or Representative Space	Representative or conceived space is constructed in the absence of an object, and is therefore reflexive. At this stage, children are already able to establish spatial relationships between elements, but only through representations, i.e. they are able to reason about an area depicted on a map without having seen it before.	Formal operations (from the age of 12)

Source: Chart based on Almeida; Passini (2013, p. 26-27) and Castrogiovanni *et al*. (2003, p. 15-16).

These initial phases of establishing spatial relationships are what allow for the construction and representation of space. This process requires the interaction of the subject with the environment in which they live, taking place through the gradual and progressive release of primitive egocentrism (Castrogiovanni, *et al*., 2003).

Together with the psychogenesis of the spatial notion in the establishment of the geographical literacy process, children begin to establish the so-called elementary topological spatial relationships. These are relationships that take place in the immediate space, starting from birth and serving as the basis for the genesis of more complex spatial relationships. These relationships form the basis for establishing spatial perception at the beginning of school activity, which takes place between the ages of 6 and 7. However, this process is only established if the previous stages have been completed. Hence the importance of establishing the psychogenesis of the spatial notion and elementary topological spatial relations.

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https://revistas.uece.br/index.php/revpemo
ISSN: 2675-519X

The first stage referring to elementary topological spatial relations is associated with relations that are processed in the following order: neighborhood, separation, order, involvement and continuity, as shown in Chart 02 (Almeida, Passini, 2013):

Chart 02 - Characteristics of elementary topological spatial relations

Elementary Topological Spatial Relations		
Types	**Features**	**Examples**
Neighborhood	It corresponds to the relationship in which objects are perceived on the same plane, contiguous, close together. It is the most elementary level of perception of spatial organization in which a child places objects.	The ball next to the doll.
Separation	The children realize that the objects, although close to each other, are dissociated and occupy different positions in space.	There is a part of the wall between the door and the window.
Order/Succession	When objects can be perceived occupying an anterior, intermediate or posterior position from a point of view.	First we have the door, in the middle the wall and then the window.
Involvement	The relations of involvement are established in the sense of the notions of interior, exterior, centrality, proximity and contour.	As an example, we have the sequences of metro stops: Arniqueiras station is between Guará and Águas Claras stations.
Continuity	It represents the continuity of space, i.e. there is no possibility of space being absent. Locations are continuous and space forms a whole. To establish the notions of continuity, all the other notions are used: neighborhood, separation, order or succession and involvement.	

Source: Chart based on Almeida; Passini (2013, p. 31-36) and Castrogiovanni *et al*. (2003, p. 17-19).

Topological spatial relationships are essential for understanding geographical and cartographic space. However, in order to understand these, children need to master the geographical concepts that define them. This process is gradual and continuous. It is only once these relationships have been established that the notions of political-administrative

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boundaries between municipalities, states, countries and their borders, rural and urban space develop.

The next stage in the construction of spatial relationships now no longer starts with the body as a reference for locating objects. They begin to realize that it is possible to use other references without this altering their location.

According to Almeida; Passini (2013), children then begin to locate objects based on the spatial relationships between them, coordinating different points of view or using coordinate systems. This process is mainly associated with the transition from egocentrism to a more objective approach to reality, through the construction of conservation structures that allow the child to think in a more reversible way.

> In the decentralization process, the child projects this axis onto objects in order to locate them independently of their position, assuming the posture of an observer. This transition is made gradually, as they realize that objects have parts and sides, which serve as references. For example, she uses the sides of the chair to indicate the position of another object: the cupboard opposite the chair. This type of reasoning extends to wider spaces: the bakery next to the butcher's, the supermarket next to the gas station, the club behind the factory (Almeida; Passini, 2013, p. 37).

This process is called projective relations by Castrogiovanni (2003) and allows objects to be related to each other in a mobile reference system, from the observer's point of view. This process is gradual and starts from a reference centered on the child themselves, which is gradually transferred to other references. This occurs through decentration, when the child projects an axis onto objects in order to locate them independently of their position, no longer using only their body as a reference.

According to Castrogiovanni (2003, p. 19), the fundamental notions involving projective relations are: right and left, front and back, above and below, and next to, comprising three possible phases to be assessed: 1) in the first stage, the child is able to give the position of objects from their point of view, a process that takes place between 5 and 8 years old; 2) in the second stage, the child is able to give the position of the object from the point of view of the other placed in front of them, a condition present between 8

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ISSN: 2675-519X

and 11 years old; and 3) the position is given by putting themselves in the place of different objects, when asked to place them between them, around the age of 12.

The establishment of projective relationships is fundamental in the teaching of geography and comprises the later stages of the geographic literacy process in early childhood education. It's very important to understand that if these stages don't take place, the process of learning geography won't take place in its entirety.

The establishment of projective relations takes place simultaneously with Euclidean space, which includes the emergence of the notion of coordinates. This makes it possible to situate objects in relation to one another, as well as encompassing the object's place and its displacement in the same structure.

According to Almeida and Passini (2013, p. 39), "Euclidean spatial relations through geographic coordinates make it possible to situate objects and guide their movement according to a structure whose referents are independent of these objects". This category includes geographical coordinates (parallels and meridians). The construction of these spatial relationships implies the conservation of distance, length and surface area, as well as the measurement of length.

Throughout the presentation of the stages that comprise the process of geographic literacy in early childhood education, as well as the later stages that include elementary school I and part of elementary school II, it is clear that this continuity is a fundamental element for the process of learning geography to take place.

It is important to note that the literacy process begins before birth, while still in the mother's womb. However, it is in early childhood education that this process needs to be stimulated, as it is a necessary condition for the other stages to be established and for the learning of Geography to take place in an integral way.

4 The BNCC and its guidelines for teaching Geography in Early Childhood Education

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It is important to note that the teaching of Geography is established in the BNCC (National Common Curriculum Base)[5] throughout basic schooling, with a focus on the early years. The proposal includes cartographic literacy, which aims to develop mastery of reading and drawing maps, based on the concepts of references, laterality, orientation, vertical and oblique vision, two- and three-dimensional images, proportion and scale, symbology and legend (BNCC, 2018).

The BNCC for primary education, where Geography is mentioned, begins its characterization by highlighting it as a subject that presents as a possibility the "[...] opportunity to understand the world in which one lives, to the extent that this curricular component addresses the human actions built in the different societies existing in the various regions of the planet" (Brasil, 2018, p. 359). The perspective of Geography in Geographical Education, as set out in the BNCC, is the construction of geographical thinking that allows the world to be read, leading these students to be stimulated to think spatially.

Geographical reasoning is the basis presented in the BNCC for exercising spatial thinking about geographical content, going beyond cartographic literacy, which is extremely important, but is not the only content that needs to be addressed. The establishment of geographical reasoning, according to the BNCC (2018), needs to involve the construction and absorption of certain principles, including: Analogy; Connection; Differentiation; Distribution; Extension; Location; and Order (Chart 03).

However, the BNCC presents the development of these spatial reading competences and skills from elementary school onwards, and does not directly address how this process is established in earlier periods, i.e. in early childhood education where the process of geographic literacy begins.

[5] Nor is it the central subject of our reflections, in this article, to deal with the entrepreneurial, neoconservative, neotechnicalist and neopragmatist character that the Base has imputed to the whole country and its "subnational curricula", other researchers such as Silva (2020) and Paula and Silva (2021) have already done so.

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Chart 03 - Description of the principles of geographical reasoning[6]

Description of the principles of geographical reasoning	
Principle	**Characterization**
Analogy	One geographical phenomenon is always comparable to another. Identifying the similarities between geographical phenomena is the beginning of understanding the Earth's unity.
Connection	A geographical phenomenon never occurs in isolation, but always in interaction with other phenomena near or far.
Differentiation	It is the variation of phenomena of interest to geography across the earth's surface (e.g. climate), resulting in differences between areas.
Distribution	It expresses how objects are distributed across space.
Extension	Finite and continuous space delimited by the occurrence of the geographical phenomenon.
Localization	Particular position of an object on the earth's surface. Location can be absolute (defined by a geographical coordinate system) or relative (expressed through topological spatial relationships or spatial interactions).
Order	Spatial order or arrangement is the most complex geographical principle. It refers to the way in which space is structured according to the rules of the very society that produced it.

Source: BNCC (2018, p.360).

We need to understand that, in order to achieve the process of building geography education in the early years, some previous processes need to be established and put into practice. For this reason, the importance of Early Childhood Education in the student's education is highlighted, not only for the establishment of Geography teaching, but for all areas of teaching.

In the earlier periods, referring to Early Childhood Education, the knowledge that precedes the process of geographic literacy and includes cartographic literacy is not directly covered in the BNCC. They appear in some fields of experience in a very subtle way, in which in each of the age groups it is possible to observe aspects related to the process of geographic literacy.

The National Common Core Curriculum in Early Childhood Education presents in its essential learning both behaviors, skills and knowledge, as well as experiences that promote learning and development in the various fields of experience, with interactions and play as structuring axes inserted in the fields of experience (BNCC, 2018).

[6] In this case, geographic literacy is considered to be the same as spatial reasoning, spatial reading or geographic education.

DOI: https://doi.org/10.47149/pemo.v6.e10985
https://revistas.uece.br/index.php/revpemo
ISSN: 2675-519X

The BNCC (2018) considers, for Early Childhood Education, the link between educating and caring, understanding care as something inseparable from the educational process. Thus, the possibility of embracing children's experiences and knowledge in the family and community environment, combined with pedagogical proposals, aims to broaden these children's knowledge, experiences and skills.

In early childhood education, we have six learning and development rights, which include: 1) Living together; 2) Playing; 3) Participating; 4) Exploring; 5) Expressing; and 6) Knowing oneself (BNCC, 2018).

If we rigidly consider the division of age groups, the stages of Early Childhood Education are organized into three groups by age: in daycare, we have babies (zero to 1 year and 6 months) and the so-called very young children (1 year and seven months to 3 years and 11 months); and in Preschool, young children (4 years to 5 years and 11 months).

There are five fields of experience for each age group, of which we can highlight: 1) The Self, the Other and the We; 2) Body, Gestures and Movements; 3) Lines, Sounds, Colors and Shapes; 4) Listening, Speaking, Thinking and Imagination; and 5) Spaces, Times, Quantities, Relationships and Transformations (BNCC, 2018).

The fields of experience that are directly associated with the process of geographic literacy include: 1) Body, gestures and movement, which enable children to explore the world, space and objects around them, becoming progressively aware of their corporeality; 2) Lines, sounds, colors and shapes, which allow children to live with different artistic, cultural and scientific manifestations, both local and universal, through diversified experiences manifested in different forms of expression and language; 3) Spaces, times, quantities, relationships and transformations, which enable children to recognize that they are inserted in different spaces and times, made up of different natural and socio-cultural phenomena (Chart 04).

Chart 04 - BNCC fields of experience and stages of Geographical Literacy

BNCC fields of experience and stages of Geographical Literacy
The Self, the Other and the We

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ISSN: 2675-519X

Babies (zero to 1 year and 6 months)		Very young children (1 year and 7 months to 3 years and 11 months)		Young children (4 years to 5 years and 11 months)	
BNCC	**Geographical literacy stages**	**BNCC**	**Geographical literacy stages**	**BNCC**	**Geographical literacy stages**
(EI01EO02) Realize the possibilities and limits of their body in the games and interactions in which they participate.	Lived Space	(EI01EO03) Interacting with children of the same age and adults when exploring spaces, materials, objects and toys.	Lived Space	(EI03EO06) Show interest in and respect for different cultures and ways of life.	Lived Space
(EI01EO03) Interacting with children of the same age and adults when exploring spaces, materials, objects and toys.	Lived Space				

“Body, Gestures and Movements”					
Babies (zero to 1 year and 6 months)		Very young children (1 year and 7 months to 3 years and 11 months)		Young children (4 years to 5 years and 11 months)	
BNCC	**Geographical literacy stages**	**BNCC**	**Geographical literacy stages**	**BNCC**	**Geographical literacy stages**
(EI01CG02) Experimenting with body possibilities in play and interactions in welcoming and challenging environments.	Lived Space	(EI02CG02) Moving their body in space, orienting themselves by notions such as in front, behind, above, below, inside, outside, etc., when	Lived Space Elementary topological relations	(EI03CG02) Demonstrate control and appropriate use of their body in play and games, listening to and retelling stories, artistic activities,	Lived Space

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ISSN: 2675-519X

		involved in games and activities of different kinds.		among other possibilities.	
		(EI02CG03) Explore ways of moving in space (jumping, skipping, dancing), combining movements and following directions.	Lived Space		
“Spaces, Times, Quantities, Relationships and Transformations”					
Babies (zero to 1 year and 6 months)		Very young children (1 year and 7 months to 3 years and 11 months)		Young children (4 years to 5 years and 11 months)	
BNCC	**Geographical literacy stages**	**BNCC**	**Geographical literacy stages**	**BNCC**	**Geographical literacy stages**
(EI01ET04) Manipulating, experimenting, arranging and exploring space through experiences of moving oneself and objects.	Lived Space	(EI02ET04) Identify spatial relationships (inside and outside, above, below, between and to the side) and temporal relationships (before, during and after).	Lived Space Elementary topological relations	(EI03ET03) Identify and select sources of information to answer questions about nature, its phenomena and its conservation.	Lived Space

Source: Prepared by the authors based on Almeida; Passini (2013, p. 26-36); BNCC (2018), Castrogiovanni *et al*. (2003, p. 15-19).

In the case of the BNCC, the process of geographic literacy is not mentioned, but appears implicitly in three of the five fields of experience. In addition, there is no association with the stages of the psychogenesis of the spatial notion, which highlights the lack of understanding of the need for the initial literacy process in the different areas of activity, especially geography.

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ISSN: 2675-519X

The spatial relationship only appears in the field of experience associated with the issue of time, where it is possible to observe a concern with differentiating the countless spaces and times within a descriptive perspective. This distinction becomes more meaningful when associated with the learning and development rights presented in the BNCC.

It is necessary to rethink the approach to literacy within the BNCC, including all the different areas, in order to highlight how the process takes place in each of the stages and the paths to successfully achieving the literacy process.

In the specific case of Geography, the importance of starting the process of geographic literacy in early childhood education lies in the fact that it can be achieved in elementary school, once the previous stages have been established.

Geography in early childhood education can expand the development of children's notions of representation and orientation of place, landscape, laterality, space and time, with teaching strategies that can help them in their cognitive, cultural and social development throughout life (Silva; Cabó, 2014).

It is necessary to rethink the fields of experience presented in the Common National Curriculum Base, bringing into the discussion the different areas of training, such as Science, Geography, History and the Arts. This aims to understand how each of these sciences is structured and what the initial stages of the literacy process are so that learning the scientific concepts of each area can take place when the student reaches the stage of cognitive development, such as formal operations, which are established from the age of 12.

5 Conclusions

It's important to note that children interact permanently in a spatial environment and, when they enter kindergarten, they have prior knowledge that can be qualified. This improves the way they understand the world, making Geography an undisputed science in the development of children in Early Childhood Education.

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ISSN: 2675-519X

This process therefore needs to be continued from the moment children enter kindergarten, ensuring that the stages and process of evolution will take place properly, starting with a literacy process that includes phases and stages to be overcome.

Literacy is the process of the student's initial contact with a given subject, starting from the idea of a lack of knowledge or little information on the subject. Throughout the process, new learning is incorporated, making literacy a reality, which constitutes the minimum knowledge necessary to establish the subsequent stages.

When this discussion is brought to the National Common Core Curriculum (BNCC), which is the standardizing document for Early Childhood Education, despite the political and theoretical problems surrounding its existence, we note that at no point is literacy or pre-literacy addressed in the document in any of the scientific areas. Subjects from the different areas of education are presented only indirectly.

Knowing that literacy doesn't only happen at the start of elementary school, but that for it to be achieved, previous stages need to be overcome and carried out. These points need to be reviewed in the BNCC, as well as an epistemological review of what literacy is and when this process begins.

This lack of connection between the axes of experience and the establishment of the literacy process needs to be revisited in official documents. The literature on the subject presents sufficient arguments about the need for the literacy process in early childhood education, as well as presenting stages, forms and models of how it should take place.

That's why it's important to revisit existing theories in the construction of legal documents, as well as to involve researchers from the field of education and different areas of specific training. This allows for an increasingly authorial/local construction and, above all, one that can bring together multiple perspectives and move towards a more multidisciplinary organization of pedagogical work, despite the challenges. Although we are only considering this possibility, from this prescriptive curricular scenario presented to us, we are enthusiastic about the idea that the field of curricular studies is alive and dynamic, and must be subverted by those who shape it. Especially when the official document does not have an emancipatory character, or, in the case of our specific reflection, when it does

not contribute to Geographic Literacy. We believe that the very complexity of the pedagogical act can summarily contribute to the emergence of countless practices, including innovative ones along these lines.

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Responsible publisher: Genifer Andrade

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How to cite this article (ABNT):
NASCIMENTO, Cláudia Pinheiro.; SILVA, Francisco Thiago. Alfabetização Geográfica na Educação Infantil: ausências na BNCC e suas interferências na aprendizagem da Geografia. **Rev. Pemo**, Fortaleza, v. 6, e10985, 2024. Available at: https://revistas.uece.br/index.php/revpemo/article/view/10985

Received on July 10, 2023.
Accepted on May 20, 2024.
Published on June 28, 2024.