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Sexual Educationin the Brazilian Common National Curricular Base: an analysis through the competences of the field of Natural Sciences

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ABSTRACT

The aim of this paper is to describe how the Brazilian Common National Curriculum Base (BNCC, Portuguese acronym) approaches the issue of sexual education in the area of natural sciences. To this end, the methodology used is a document analysis consisting of the investigation of versions of the BNCC and official documents related to Brazilian education. Considering the importance that the curriculum represents for society, there is a need for debate on a national document that fulfils the role of guiding the basic knowledge which is essential for children and teenagers' learning. This article focuses, particularly, on political issues of curricula framework that are embodied in the designing of BNCC through a qualitative method and through documentary sources. As a basic result, there were few competences that addressed sexuality in Brazilian BNCC, yet in a reductionist way, limiting sexuality to aspects of human anatomy and physiology.

Keywords: National curricula; sexual education; science education.

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Educación para la sexualidad en la Base Curricular Nacional Común de Brasil: un análisis a través de las competencias del campo de las Ciencias Naturales

RESUMEN

El objetivo de este trabajo es describir cómo la Base Curricular Nacional Común de Brasil (BNCC, sigla brasileña) aborda el tema del educación para la sexualidad en el área de las ciencias naturales. Para ello, la metodología utilizada es un análisis documental consistente en la investigación de versiones del BNCC y documentos oficiales relacionados con la educación brasileña. Considerando la importancia que el currículo representa para la sociedad, es necesario debatir un documento nacional que cumpla con el rol de orientar los conocimientos básicos esenciales para el aprendizaje de niños y adolescentes. Este artículo se enfoca particularmente en temas políticos del marco curricular impactados en el diseño de BNCC a través de un método cualitativo y a través de fuentes documentales. Como resultado básico, había pocas habilidades que abordaran la sexualidad en el BNCC brasileño, pero de una manera reduccionista, limitando la sexualidad a aspectos de la anatomía y fisiología humana.

Palabras clave: Currículos nacionales; educación para la sexualidad; enseñanza de las ciencias.

1. Introduction

Within the Brazilian scenario, the debate on education is increasingly latent in society. If we ask people, who walk through the urban centers of large cities, what a viable solution for facing the problems of socioeconomic development in Brazil would be, it is possible that many will say that the country needs more school education. In fact, school education is a large part of our identity (Bay-Cheng, 2003). Through the education process, we develop our own views of the world, citizenship, learning, gender, justice, body, sexuality, equity, etc. It is in this context that the relevance of investigations which aim to study the curricula arises. According to Lopes and Macedo (2014), everything we learn at school is contained in its underlying curriculum, so curriculum documents are seen as carriers and materialized axes of outlined curricular objectives.

The topic of sexual education and studies on the teaching of content related to sexuality in schools has been the subject of investigations throughout the globe, vehemently since the end of the 20th century (Donovan, 1998). A brief review of the literature in the area indicates that researchers around the world have been developing and analyzing curricular proposals on sexuality (García-Cabeza & Sánchez-Bello, 2013; Jacobs & Wolf, 1995; Kirby, 1999; Ryan, 2000; Trudell & Whatley, 1991). The following is a brief overview of the literature investigated in the last thirty years. Initially, the world outlook on the subject will be portrayed, and later the specific aspects of the Brazilian socio-educational reality will be addressed.

Trudell and Whatley (1991) carried out a specific case study on sexuality, showing that some curricula widespread in the United States of America have some weaknesses, once they: conveyed insufficient and inaccurate information; figured on scare tactics to endor-

se people's behavioral arguments; did not take into account the students' backgrounds; and strengthened gender stereotypes.

Bay-Cheng (2003) examined some American school-based programs on a moralistic agenda and several presuppositions of teen sexuality, resulting in a biased and inadequate approach to sex education. To the author, a curriculum that takes into account a narrow view of sexuality can favor the creation of stereotypes, as well as it can misinform adolescents, reduce sex to a "heterosexual and coital" manifestation and project a particular message of who and how teens are and should be.

García-Cabeza and Sánchez-Bello (2013) claim that sexual education is mainly dealt with as part of the combined subject of biology and geology in the Spanish school curriculum, however there is a tendency to reproduce a traditional framework of sexual education.

In Australia, Jones and Hillier (2012) detailed the position of gay, lesbian, bisexual, transgender, intersex and queer (GLBTIQ) students within education policy documents nationally. The research demonstrates that there are significant correlations between policy and a variety of well-being and psycho-social outcomes for GLBTIQ students, including lowered incidence of homophobic abuse and suicide and creation of supportive school environments. These results endorse the relevance of the topic being regularly addressed in schools.

Despite the difficulties faced in addressing the topic of sexuality in school curricula in the United States of America, Ryan (2000) claims that the subject should be included in school activities in order to reduce the risk of children developing sexually abusive behaviour patterns. Children have a legitimate need for validation and correction of sexual learning. Adults (parents, relatives and people from our social circle) often have not been able to respond consistently to children's behaviors. It is, therefore, another reason for including sexual education in curricula.

This approach provides a comprehensive and favorable occasion for students to become knowledgeable and comfortable in dealing with a critical, though sensitive, aspect of human behavior. Sexuality is typically shrouded in myth, misinformation and controversy (Leiblum, 2001).

The literature indicated in the previous paragraphs shows that the topic is socially relevant and that countries treat sexual education differently. Therefore, it becomes relevant to study their national approaches (García-Cabeza & Sánchez-Bello, 2013; Jacobs & Wolf, 1995; Kirby, 1999; Ryan, 2000; Trudell & Whatley, 1991). This discussion on the topic of sexual education and / or the topic of sexuality has also been taking place in Brazil, a country that has undergone important curriculum changes since the 1990s. In June 2015, the Federal Government of Brazil- Ministry of Education (MEC, Portuguese acronym) - made efforts to elaborate the first and second versions of the Common National Curricular Base (BNCC, Portuguese acronym). Thus, for the first time in Brazil's history, a dialogue was initiated between public authorities, school communities, and teaching groups, with the conception of designing a minimum curriculum direction (Neira et al., 2016). The text of BNCC would become a supporting material for the elaboration of public and private education. In this way, teachers in Brazilian schools could think about the teaching strategies they would develop to reach the curricular objectives set out through the devices contained in the BNCC.

After a series of actions initiated in 2014 - collective meetings, public hearings and analysis of invited experts - the Brazilian Ministry of Education centralized the writing of the final BNCC document. To understand this fact, it is important to highlight that the elaboration of the BNCC versions were carried out in a troubled political scenario. In the governmental context of the time, the presidency of Dilma Rousseff (2011-2016) had Cid Gomes as Minister of Education, with the responsibility of starting organizing the commissions for the construc-

tion of the Base. However, in that period, several individuals held the position of Minister of Education, thus compromising the proper development of the document. The first version of the BNCC was built and made available in September 2015. In 2016, the political context took new directions after the impeachment of President Dilma Rousseff, which led Michel Temer to become president, Dilma's vice-president at the time. Given the scenario of political disputes in the country, the second version of the BNCC was delivered in May 2016. After the political coup, the entire commission of experts who participated in the preparation of the first two versions of the BNCC was modified, implying the discontinuity of the document. The curriculum's final version for kindergarten, elementary and middle school was published in 2017, as well as for the high school version in 2018 (Brasil, 2019). It is worth noting that elementary education in Brazil is equivalent to the elementary and middle school levels in the United States.

In the present study, the term "curriculum" will be considered as a social practice that is embodied in institutions, knowledge, norms, moral prescriptions, regulations, relationships, values and in being a citizen. Based on the historical and political conditions of the society that shape itself according to its power relations, the curriculum is not designed in an exempt manner (Sacristán, 2000; Young, 2013). After all, within curricular theories (Lopes & Macedo, 2014), in education, as well as in science, there is no neutrality.

Due to this particular historical context that Brazilian education incurs and its recent national curricular change, the development of investigations on the subject of sexuality becomes relevant. Several authors have been carrying out scrutinizing on such topic in this country (Brandao & Lopes, 2018; Cruz et al., 2016; Dinis, 2011; Figueiró, 1996; Reis & Eggert, 2017; Ribeiro, 2009; Santos et al., 2011). In addition to these, Furlanetto et al. (2018) mentions that, between 2010 and 2016, about 24 empirical papers were published in Brazil on the themes of sexual education and sexuality in schools. However, there are still few analyses on the subject within the formal curricula, especially regarding BNCC. Therefore, the current research becomes relevant, considering the lack of investigations on the topic that is being discussed.

Similarly, Reis and Eggert (2017) indicate that there is a need to both continue the discussion and focus on effective implementation of issues such as gender and sexual orientation at school, considering the curriculum first. Therefore, the need becomes urgent after the recent publication of the final version of the aforementioned document.

Based on what was discussed above, the objective of this paper is to analyze how the Brazilian BNCC approaches the issue of sexual education (sex and body education) in the area of natural sciences. For Brazilians, the area of natural science brings together the disciplines Biology, Physics and Chemistry, which are taught in elementary schools as a single subject (called "Natural Science" or just "Science"). On the contrary, in Brazilian high schools, these subjects are taught separately (Biology, Physics and Chemistry). The BNCC curriculum document brings the same division with respect to the area of natural science. A line of investigation is based on a qualitative approach and documentary sources analysis (Brasil, 1996, 1998, 2014, 2019; Movimento Pela Base, 2017), followed by a critical reflection on competencies and skills related to the theme, both in elementary and in high school.

The selection of the natural science field as a starting point for our analysis lies on the fact that, traditionally in Brazil, teachers in this area play an important social role with regard to sexuality, since it is directly linked to the studies of the human body. This latter contend, in turn, is a fundamental theme in science classes. Certainly, it is understood that sexuality covers other aspects as well (affectivity, sociability, identity, knowledge about oneself and about others). In this paper, however, we narrow down the scope of analysis to the field of natural science.

In general, at the same time that these curricula, throughout the school degrees, form their students from certain knowledge, they are also forged through the absence of what we fail to learn at school (Sancristán, 2000). The appropriateness of sexual education curriculum documents in Brazil in recent years has been questioned from various perspectives. The official curriculum of the Brazilian government and its different curricular policies are criticized due to the absence of curricular content related to sexuality in its social, political and gender axes, as well as for the documents' explanation of merely anatomical and physiological aspects of the human body (Altmann, 2001; Barbosa et al., 2019; Brandao & Lopes, 2018; Dinis, 2011; Furlanetto et al., 2018).

The school is one of the places that are responsible for disseminating scientific and cultural information about the human body and their relationships. Although relevant, the school is not the only place where young people seek clarification on the topic (Jacobs & Wolf, 1995; Jones & Hillier, 2012; Ryan, 2000). Taking into account that all human beings are social individuals, it is indisputable that a person turns to other social groups to learn about their sexuality, whether in the family, church, or neighborhood (Kirby, 1999; Trudell & Whatley, 1991). Thus, the opportunity to teach the basics on the subject in a systematic way may be lost. Such teaching must be based on scientific knowledge built over historical time (sexuality, gender, human anatomy, among others).

A specific formal school curriculum which fails to address human sexuality does not prevent individuals from taking their own opinions on the topic, as they will still have access to information about it, though not in an organized and systematic way, resulting in a possible fragmentation of that knowledge. In this regard, we can make a parallel discussion with what Saviani (2012), Arroyo (2007) and Young (2013) discuss on what is denominated as knowledge of law. In other words, it is the knowledge acquired in the subjects' daily lives. In the quest to establish beyond a democratic education, in which everyone must have the right to knowledge built by society, there is also a need for the right to essential knowledge that the student must have access to during their school trajectory so that their rights to learning and development are guaranteed.

Taking into account the importance of what the curriculum represents for Brazilian society, there is a need for debating on a nationwide document that fulfils the role of a curriculum that guides the basic knowledge which is essential for the learning of children and young people (elementary school and high school). Being so, we clarify that, in a particular way, this article approaches sexual education, which according to Altmann (2001), is a topic of public interest since the sexual conduct of the population concerns public health, birth rates and vitality of future generations.

Sexuality can be defined as a process built throughout the development of the individuals influenced by learning, together with social and cultural experiences (Furlanetto et al., 2018). In this paper, we have chosen the term *education for sexuality*, which is a conceptual, educational and methodological approach that replaces the biological/reproductive scope, encompassing contextual, social and historical issues related to sexuality.

Supporting this approach, Farrelly et al. (2007) have sought to contextualize sexual education within broader issues of gender, education and inequality, arguing that schools need to examine how they combat hegemonic masculinity as a starting point for a more open-minded approach to such education.

Regarding this theme, Brandao and Lopes (2018) warn that, in Brazil, the perspective of social construction of gender and sexuality is seen as controversial in the educational setting and in the social environment. On the one hand, sexuality has been questioned because it is considered to be disjunctive to the hegemonic notion of family for certain religious and

political segments, and should therefore not be dealt with at school. On the other hand, the theme is seen as essential to schools, supported by the discrimination and violence suffered by students due to persistent gender stigma and inequality in school spaces. Thus, for the supporters of the latter viewpoint, the one which we are in agreement with, such curricular contents contribute to the educational process of living with social diversity (sexual, gender and racial).

In the last decade in Brazil, a series of events related to the topic of sexuality have gained notoriety, including aspects related to the public sphere and educational policies. Among such events, Pereira and Monteiro (2015) highlight: the prohibition on the distribution of anti-homophobia bibliographic material in the public school system in May 2011; the suspension of the dissemination of videos on sexually transmitted infections prevention among young people in December 2011; the censorship by the Ministry of Health of the Carnival education campaign for young homosexuals in February 2012; the veto of the campaign aimed at sex workers and the proposal for the Statute of the Unborn Child, violating women's human rights, in June 2013.

Still linked to the scope of education and sexuality, a series of Bills and Constitutional Amendments which have emerged in recent years do not prioritize education as a public policy. As an example, the Bill 867/2015 stands out by including, among the guidelines and bases for the national education, the *School without Party Program* (Escola sem Partido, in Portuguese) which aims to "inform students about their right not to be indoctrinated and manipulated by their teachers" (Escola Sem Partido, 2019, free translation). As stated in the text of the aforementioned bill, its second section states that the Public Power will not interfere in the students' sexual development process. Furthermore, no partisanship or dogmatism in the treatment of gender issues will be allowed.

This Brazilian historical context emanates from a society wherein, according to Furlani (2007), the categories of "sex", "sexuality" and "gender" were already treated as curricular "monsters", that is, these terms were combated in favor of the Christian morality, dominant in Brazilian society. As of 2010, a battle of ideas begins to be contested in the public sphere against the term "gender ideology". Reis and Eggert (2017) scrutinize the political and educational implications of this conflict.

The words "gender" or "sexual orientation", according to the advocates of a more conservative posture in a Brazilian Christian society, refer to an ideology that seeks to cover up the fact that human beings are naturally divided into two sexes - male and female. According to this ideological chain, the differences between men and women, in addition to the obvious anatomical implications, do not correspond to a fixed nature, but are the result of a social construction (Reis & Eggert, 2017). The most conservative wing of Brazilian education is opposed to the use of terms such as "gender", "sex education" and "sexual orientation" in official curricula, as they believe that the school is not a place for the teaching of sexuality. This theme should be exclusive to family and religious educational settings.

On the other hand, defenders of sexuality as a topic that should be addressed in schools present another viewpoint on the subject (Furlani, 2007; Reis & Eggert, 2017). The teaching of sexual education contents, such as Sexuality and Infectious Diseases, does not increase any measure of sexual activity in young people, according to Kirby (1999). Thus, these programs can be an effective component in a larger initiative to reduce sexually transmitted infections and unplanned pregnancy in adolescence (Jacobs & Wolf, 1995; Trudell & Whatley, 1991).

This clash of ideas on the theme of "gender ideology" seems to mirror broader social and political issues in Brazil linked to the beginning of numerous attacks on education, including funding reduction (Brasil, 2016; Orso, 2017), giving place to the new curriculum - BNCC

(Brasil, 2001, 2016, 2017). Considering this context, it is relevant to define what sexuality is about in the school environment and its conceptions in this regard, which may have different approaches, such as: religious, medical, pedagogical or political (Carvalho, 2009). Thus, according to Nunes (2011), there is a tendency in Brazil to reduce this theme and analyze it in a one-dimensional way that encompasses only the biological, anatomical and/or personal range, thus this aspect of sexuality becomes very common in the school curriculum. From what can be seen, this scenario is restricted to the study of reproductive systems and contraceptive measures, themes that are directly linked to the field of natural sciences.

Below, a brief summary of how the process of building the text of BNCC took place is developed. Then, some textual elements extracted from the document are listed and discussed, focusing on skills related to sex education in the area of natural sciences in the Brazilian national curriculum.

2. Understanding how BNCC desingning process occurred

It is essential to start this section by addressing the main historical moments that marked the construction of the BNCC, a mandatory national curriculum, in order to understand the context in which it is inserted and its social function. Therefore, BNCC emerges as a historical demand for the formalization of a national curriculum whose main role is to be the basis for subsidizing school curricula (mandatory for public and private institutions) all over Brazil, being its important support for the planning, evaluation, regulation and federal control of Education. Prior to the creation of BNCC, previous Brazilian curricula were not of a mandatory directive nature. At that time, the only legal obligation of Brazilian educational institutions was to follow national legislation on education, the latter of which deals with aspects of the organization, financing and functioning of education. The curricular themes, specifically content, objectives and national curriculum goals were not present before the BNCC. It is worth mentioning that the National Curriculum Parameters (PCN, Portuguese acronym) in 1998 presented these aspects, but not in an obligatory way. Still, in this section, we give a better context about this Brazilian curricular document.

Besides the Brazilian 1988 Federal Constitution itself, which grants an understanding of education as a right of all citizens aiming at the full development of the person, there is another national document that has taken up the importance of formulating a National Curriculum: the Law of Guidelines and Bases for National Education (LDB, Portuguese acronym, Law n° 9.394/1996). Recently, legislative changes were made to the LDB, a milestone in the dispute over the narrative that would be implemented in BNCC, which was the change of the original text of the LDB. These changes were proposed by Provisional Measure No. 746 of 2016 and were related to the withdrawal of mandatory approval from the National Council of Education and the Minister of Education for the inclusion of new curriculum components in the BNCC. However, Law No. 13,415 of 2017, inserted in the LDB, states that the inclusion of new mandatory curriculum components in the BNCC necessarily depends on the approval of the National Council of Education and ratification by the Minister of State for Education.

Another national document that highlighted the importance of BNCC was the National Education Plan (PNE, Portuguese acronym), approved by the law No. 13,005, of June 25, 2014, in which a national curricula is cited as one of its legal strategies:

GOAL 7.1) establish and implement, by means of an inter-federative agreement, pedagogical guidelines for basic education and the common national base of curricula, with rights and objectives for the learning and development of students for each year of elementary and secondary school, respecting regional, state and local diversity (Brasil, 2014, free translation).

As stated in the PNE in its goals and strategies, the pedagogical guidelines for Basic Education and the national curricula must respect regional, state and local diversity. One of the ways that could have been considered to meet the PNE would be to deepen the discussions and improve the document through its effective connections with the legal definition of rights, learning and development objectives. Another path would be the resumption of some references of the National Curriculum Guidelines expressed in an articulated set of principles, criteria and procedures observed by the education systems, by the institutions and schools in their planning organizations. Thus, the PCN, which are guidelines made official by the Brazilian government in 1998, which were the result of months of work and discussion carried out by specialists and educators from all over the country to formulate references for the execution of school work in Brazil. The preparation of the PCN took place at a time when the State sought uniformity and order in national curricula. Despite this, the PCN have curriculum proposals that value cross-cutting themes and the importance of discussing, in the classroom, significant issues for Brazilian society, such as the Environment, Health, Ethics, Sexual Orientation, Work, Cultural Plurality, among others.

However, this is not what happened in Brazil. Legislators at the Ministry of Education decided to come up with a new national curriculum model; BNCC. Therefore, BNCC setting invariable pedagogical actions with the learning objectives dissociated from the integral development of the student, which then limits the right to education and learning, thus going against the principles of the PNE (Aguiar & Dourado, 2018).

Aguiar and Dourado (2018) highlighted these aspects based on the document "Request for views of the counselors of the National Council of Education - CNE, Aurina Oliveira Santana, Malvina Tuttman and Márcia Angela Aguiar", carried out on December 15, 2017. Document in which the counselors declared their vote against the Opinion referring to the BNCC.

It is relevant to realize that there were tensions arising against the inclusion of gender and sexual diversity contents in the PNE and in BNCC. Conservative sectors represented by different entities (NGOs and Political Parties linked to the Brazilian Christian religious movement) believe in a recurrent formulation that the "gender ideology" would be a considerable threat against the family (Brandao & Lopes, 2018).

3. Methodological procedures

Based on all the issues discussed in the previous topics, a brief analysis of how the final version of BNCC presents the topic of sexuality in the field of natural science is presented below. In order to meet this challenge, the current research methodically followed the indications proposed by authors of the line of research on national curricula (Mhlolo & Venkat, 2009; Opertti et al., 2018).

The methodological strategy used in this research was document analysis, which involves the investigation of internal documents, located inside the organization or external documents, found outside the organization. Examples of documents that can be analyzed are projects, letters, plans, regulations, policies, literary works, photos, films, statistical data, among others (Cardno, 2018; Flick et al., 2004; Zanella, 2013).

Among the archives of an external nature are government documents that can be of municipal, state and national origin. Thus, the documental analysis of public policies is extremely relevant for the understanding of our object of study. The investigation of official educational documents can make it possible to understand the theoretical and practical obstacles involved in the field of education (Cardno, 2018; Flick et al., 2004). The BNCC is a national curriculum document that guides the teaching and learning process in Brazilian schools. Therefore, it is important to understand its theoretical and methodological principles, as

well as how this document can affect the daily life of the classroom. The approach used in the analysis is qualitative, as it aims to know how a given phenomenon manifests itself in its entirety, without measuring or using statistical elements for data analysis (Prodanov & Freitas, 2013; Zanella, 2013).

We started researching on the textual content of the BNCC, Brazilian National Curriculum Framework, following some criteria that have been elaborated, determined and applied for the analysis: (i) Rationale: it includes the process of evidence gathering and preparation stages involved in the development of a curriculum framework; (ii) Scope and Component of the Curriculum Architecture: it is where the vertical and horizontal scope of education as well as the components of natural sciences curriculum will be described; (iii) Natural science curriculum contents: this is where the contents and subjects added to the curriculum are highlighted and examined. After this selection of criteria, we proceeded to a deep reading of the textual content of the material, entering a line of investigation of the documentary analysis type (Mhlolo & Venkat, 2009; Opertti et al., 2018). The textual researched material was composed of versions of the BNCC and documents related to Brazilian federal education (Brasil, 1996, 1998, 2014, 2019).

4. Exploring the current components and skills related to sexual education in the natural science section of BNCC

For a better understanding of the text below, the BNCC was carried out during a long process, with several versions and modifications. Such changes were caused by the hectic political context of the time, reported in the introduction to this work. The first version of this curricular document was prepared in 2015 and was made available for public consultation until March 2016, in order to receive contributions and criticisms from the population. In accordance with the changes suggested by the community, in May 2016 the second version of the BNCC was published. This second version of the document also underwent reorganization. In December 2017, the third version of the BNCC for pre-school and elementary education was approved by the Ministry of Education. In 2018, the BNCC version for secondary education was published.

The first version of BNCC legal document was launched for public consultation in September 2015, through a website made available by the Ministry of Education. In this version, the themes that pervade sexuality were foreseen into two points of the science curricular components, specifically in the unit "Life: constitution and reproduction". This theme was proposed for the ninth grade of school education "with the components and functioning of the male and female genital apparatus and the proposal to understand the physical, physiological and behavioral changes that occurred in the puberty process" (Barbosa et al., 2019, p. 5, free translation). Thus, the document portrays sexuality as a basically structural and physiological content.

On the other hand, the third version of BNCC, according to a study made by Menezes et al. (2017), showed that both the constitution of corporeality and the experiences with the human body placed in the curriculum document are learned by children apart from social context. Considering the investigation developed here, it is clear that there is no change from the first version to the third version of the document, which continues to impose sexuality with generic bodies, vague and emptied of sense, merely following an anatomic-physiological view of the human being.

In its final version, , when referring to education in the initial school years and before discussing the specific skills of elementary school, BNCC presents the following quote "they [children] have the opportunity to explore environments and phenomena and also the rela-

tionship with their own bodies and well-being, in all fields of experience" (Brasil, 2019, p. 331, free translation). In the following paragraphs, still on the same page, it is mentioned that children should: "systematize their first explanations about the natural and technological world and about their body, their health and well-being".

The excerpt above shows the way in which sexuality is dealt with in the curricular document, which is written in a shallow manner taking into account that the categories body, well-being, fields of experience and health will not be further explored throughout the text of the same document. One can see in advance the result of the theoretical disqualification that BNCC suffered throughout its versions, especially with regard to the final version. This scenario is a consequence of the political context in the period of preparation of the various versions of the BNCC, the lack of discussions on the content of the versions and the constant changes in education ministers and member commissions.

In the curricular document, the dimension of the body that the text refers to is not clear, leaving the clear impression that the theme is restricted to anatomical and physiological aspects of the human being, disregarding relevant themes such as gender issues and combating sexual discrimination, elements of its potency for elementary education. These same perspectives can be raised regarding the categories of well-being, fields of experience and health. These results are in line with research carried out by other authors in the national context, taking into account other curricular proposals (Altmann, 2001; Barbosa et al., 2019; Brandao & Lopes, 2018; Furlanetto et al., 2018; Furlani, 2007).

Supporting this approach, Barbosa et al. (2019) point out that the theme of sexuality in the final version of BNCC was compressed into the curricular contents of reproduction and sexually transmitted infections, which are covered only in the Science discipline in the eighth grade of elementary school.

Its pedagogical implications can directly influence the theoretical and methodological conceptions adopted by teachers throughout Brazil, reflecting the alienation of children and young people with regard to the existence of a patriarchal system as a definer of the roles played by men and women, generating an oppositional relationship between them and superiority of men over women (Brandao & Lopes, 2018). Furthermore, this situation can generate an alienation towards the body itself by overvaluing the upper parts (rational) to the detriment of the intimate parts (pleasure). This is definitely a step backwards if we acknowledge that studies on gender and sexuality have been advancing in recent years and that this discussion was already present in the PCN and is now being discarded because it is considered as "gender ideology" (Furlani, 2007; Pereira & Monteiro, 2015; Reis & Eggert, 2017; Ribeiro, 2009).

In order to emphasize the issues discussed above about gender relations and how children's bodies are treated in a generic and empty way in BNCC, below we mention the section of the PCN (Brasil, 1998) with a cross-curricular theme on Sexual Orientation that deals with the same matters. In return, the education for sexuality content in this document is very detailed and broad:

In this exploration of the body itself, in the observation of the body of others, and based on family relationships, the child discovers himself in a sexual body of a boy or girl. The individual is then more concerned with the differences between the sexes, not only the anatomical ones, but also all the expressions that characterize the man and the woman. The construction of what it means to belong to one or the other sex occurs through the different treatment for boys and girls, including expressions directly linked to sexuality and the socially established standards of women and men. These patterns come from social and cultural representations

built on the biological differences of the sexes and passed on by education, which is currently called gender relations. These absorbed representations are fundamental references for the constitution of the child's identity (Brasil, 1998, p. 81, free translation).

Continuing the critical analysis of the BNCC in relation to the topics indicated to be worked on in basic education; there are indications regarding sexual education in the first grade of elementary school. In this curriculum, there are two skills that are directly related to the topic at hand. Skills for the BNCC are the essential learnings that must be assured to students. These two skills are intended to:

(EF01CI02) Locate, name and graphically represent (through drawings) parts of the human body and explain its functions;

(EF01CI04) Compare physical characteristics between colleagues, recognizing diversity and the importance of valuing, welcoming and respecting differences (Brasil, 2019, p. 331, free translation).

The EF01CI02 skill as a curricular component is fundamental for the child's cognitive development, since the production of drawings significantly stimulates creativity. At this stage of schooling, the child begins to show emotions from his actions and drawing can become a way for the child to express her/himself and thus express her or his perception of the world (Bay-Cheng, 2003; Kirby, 1999; Jacobs & Wolf, 1995; Santos et al., 2018).

However, a criticism that could be added to the EF01CI02 skill is the isolated use of the design of the human body parts as if they did not integrate a whole, in a biological and social body. BNCC will not tend to change the hegemonic idea of the body / sexuality by keeping a reductionist perspective of studying the human body through its segregated parts. Such a way of looking at the theme is reflected even in Brazilian medicine. According to Bissoli (2018), several studies since the middle of the 20th century already claim a differentiated approach between the multidimensional and systemic aspects in order to overcome the reductionist study of the human body.

The EF01CI04 skill, despite bringing important elements such as appreciation, acceptance and respect for differences, does not explain which diversity should be recognized and what differences must be respected. Would it be biological, cultural, social, race or sexual diversity? By not making these issues explicit, it is once again evident that BNCC treats children and their bodies in a generic way, showing a more traditional aspect of sexuality that is concerned with maintaining the values established by patriarchal society. This curriculum document, by not mentioning what diversity it refers to, does not lead to discussions involving power relations, therefore not motivating social transformation. As Figueiró (1996), Sacristán (2000) and Young (2013) explain, the absence of certain content in the curriculum also says a lot about the intentions of its designers.

The BNCC text analyzed above may even have a real concern with respect for differences through a more inattentive look. However, when scrutinizing the curriculum document more critically, we realize that it does not explain which differences must be respected and so becomes open to any type of interpretation, probably shallow interpretations consistent with the prevailing hegemonic ideas. On this account, considering a political approach to sex education and the lack of the gender debate, it is possible to notice the final objective of such absence, which is the maintenance of the current power relations.

Still keeping in mind the analysis of science skills in elementary education, the curriculum content that is explicitly related to sexuality can only be found again in the eighth grade of middle school, as explained below.

(EF08CI07) Compare different reproductive processes in plants and animals in relation to adaptive and evolutionary mechanisms.

(EF08CI08) Analyze and explain the changes that occur at puberty considering the performance of sexual hormones and the nervous system.

(EF08CI09) Compare the mode of action and the effectiveness of the various contraceptive methods and justify the need to share the responsibility in choosing and using the most appropriate method for preventing early and unwanted pregnancies and Sexually Transmitted Diseases.

(EF08CI10) Identify the main symptoms, ways of transmission and treatment of some Infectious diseases (with an emphasis on AIDS), and discuss prevention strategies and methods.

(EF08CI11) Select arguments that highlight the multiple dimensions of human sexuality (biological, sociocultural, affective and ethical). (Brasil, 2019, p. 349, free translation).

These are the first skills through which the curriculum content deals directly with sexuality and that it is worked on in conjunction with infectious diseases, early pregnancy and health prevention mechanisms.

The curricular skill EF08CI07 plays an important role in understanding the meaning of reproduction and understanding the reproduction of living beings as a natural process of life, which all beings carry out. EF08CI08 supports the relationship between reproductive processes in general and the specific process that occurs in the body of each young person, even if still in a reductionist way, relating puberty only to the hormonal and nervous systems.

Skills EF08CI09 and EF08CI10 complement each other. The latter highlights the curriculum content associated with Infectious diseases and how to prevent them, paying attention to the emphasis given to Acquired Immunodeficiency Syndrome (AIDS, Portuguese acronym).

The last one listed above, curricular skill EF08CI11, differs from the previous ones in that it escapes what Santos et al. (2011) consider as an exclusively anatomical-physiological approach, which limits issues of sexual education to teachings about the concepts of body asepsis, disease control and prevention, and the restricted view of sexuality, calling into question some of its multiple dimensions. However, even considering the biological, sociocultural, affective and ethical dimensions of human sexuality, EF08CI11 maintains a direction that comes from the beginning of the document by disregarding the dimensions of gender and sexual orientation.

It can be seen from the analysis of the skills and curricular contents cited above some setbacks of BNCC (Brasil, 2019) in relation to the PCN (Brasil, 1998). PCN instructs schools to provide students with knowledge about their own bodies, notions about health care, discussion about the roles of men and women in society, as well as providing information on ways to prevent infectious diseases, also raise awareness about discrimination against people with the human immunodeficiency virus (HIV). The text of the final version of BNCC, on the other hand, addresses issues of body and infectious diseases in a superficial way and completely excludes the debate related to gender. This, in turn, guarantees the continuity of a set of values and conditions already established for gender roles, work, wealth distribution, morals, religion, etc. (Cruz et al., 2016).

It is noteworthy that in the PCN there is an explicit cross-curricular theme on "Sexual Orientation", treating it as inherent to health and human life, aiming at promoting reflections and discussions for school communities so as to promote Human Rights. It differentiates from BNCC by expressing issues such as respect for diversity, body self-awareness and even gender relations (roles of men and women) in a clear way.

That way, the textual approaches exposed in BNCC for Elementary Education, the elements and skills related to sexual education in the natural science section for High School also follow the same path. The section is basically divided into three competencies and their respective skills. Bearing in mind that the first competence refers to relations between matter and energy, it is not therefore related to the theme of this paper. Only two specific skills of the following two competences were analyzed, since they are related to sexuality.

(EM13CNT208) Apply the principles of biological evolution to analyze human history considering its origin, diversification, dispersion across the planet and different forms of interaction with nature, valuing and respecting human ethnic and cultural diversity.

(EM13CNT305) To investigate and discuss the misuse of knowledge from the Natural Science in the justification of processes of discrimination, segregation and deprivation of individual and collective rights, in different social and historical contexts, to promote equity and respect for diversity. (Brasil, 2019, pp. 557 - 559, free translation).

Reflecting on the aforementioned high school curriculum, the scarcity of content related to sex education became more noticeable, though the EM13CNT208 skill is broader as it encourages students to analyze the human history, its dispersion throughout the planet and the incentive to respect the diversity of human beings. Even if it were not written in the document, a teacher in the most critical area could address issues such as gender roles based on this skill. However, the limitation is that this perspective is not explicit in the curriculum, leading to believe that it is not something that will be addressed in the vast majority of Brazilian schools.

The skill EM13CNT305 if it is directly related to sexuality when it concerns respect for diversity, once again there is no clear mention of sexual or gender diversity. Consequently, these may come to be included in a classroom dynamic depending on the teacher's decision to do so.

The results of this documental analysis corroborate the investigations of several researchers on curricula related to school teaching about sexuality in different countries and historical contexts (Bay-Cheng, 2003; Kirby, 1999; García-Cabeza & Sánchez-Bello, 2013; Jones & Hillier, 2012; Leiblum, 2001; Ryan, 2000; Trudell & Whatley, 1991). Despite being different and diverse from a methodological and theoretical point of view, these studies indicate that there is a low incidence of curricular themes related to sexuality and that the contents exposed in the curricula indicate a hegemonic trend of predominance of a conservative, traditional, and anatomical view, excluding (or omitting) central aspects of sexuality (social, difference studies, queer theory, gender, among others).

5. Some final considerations

Education for human sexuality is essential for the formation of the human being, both personally and socio-politically. Schools must collaborate with this learning of young people by including sexuality as part of their curriculum. Therefore, it is advocated that school curricula should go beyond content related to human reproduction and infectious diseases, and should involve curricular knowledge that allows students to develop skills and ethical values to make healthy choices about their sexuality.

In the last decades in Brazil, several documents emerged, such as the PNE, PCN, and more recently BNCC, which brought great advances in the debate related to sexuality and gender education in the country. Although not enough, these curricular documents brought some advance on the subject and, consequently, on its appropriation by Brazilian schools.

However, the political, economic, and social crisis we faced since the 2016 constitutional coup directly impacted the construction of the Brazilian Common National Curricular Base, which reached its final version with an emptying of the sexuality field, not even mentioning the issue of gender. BNCC has become the basic curriculum source for schools across Brazil, a document that brings a purely anatomical-physiological and restricted approach to sexuality that is presented in a shy way in elementary school, while in high school the theme is almost non-existent.

Thereafter, it will be up to the teachers, mainly those from the natural sciences field, to mediate the space-time of the classroom to bring aspects of sexuality that need to be discussed with young people in a scientific and systematized way, though such not explicit in BNCC curriculum. It is necessary to supplant the normative conceptions of such a curriculum to guarantee the teaching of body knowledge, the gender equity and the end of sexual discrimination.

In addition to the aspects related to BNCC document, there is a need to progress in the debate on sexual education and investments in teacher training, through initial and continuing training, aiming to overcome discriminatory sexual standards and promote a culture of reflection in the school environment.

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