Chapter 15 Environmental Education Research and the Political Dimension of Education for Citizenship: The Brazilian Context

Luiz Marcelo de Carvalho and Heluane Aparecida Lemos de Souza

Abstract In this chapter, we aim to explore the relationship between education and the process of citizenship construction in Environment Education (EE) research reports and essays (master and doctoral studies) carried out in Brazil, between 1981 and 2012. Considering the texts analyzed as a discursive processes, which take part in an infinite chain of meaning production, our study enables us, in one hand, to recognize how susceptible we are to generalizations and to decontextualized universalizations in which the ideal of citizenship is founded on principles of liberal or neoliberal inspiration. On the other hand, resistance to the construction of false universalities, which are supported by the ideologies of hegemonic groups, was clearly present in a set of these analyzed texts. As part of an international researchers and educators' community, it is important to recognize that we are involved in a context that is full of conflicting ideological interests. This reality, in turn, influences the formulation and the implementation of public policies in education/environmental education as well as knowledge production and dissemination.

15.1 Environmental Education and Citizenship Education

The relationship between education and the processes of citizenship construction has been exhaustively explored and emphasized in the literature (Peixoto 2010). According to Arbués (2014), "since the final decade of the twentieth century

L.M. de Carvalho (⋈)

Departamento de Educação. Instituto de Biociências, Universidade Estadual Paulista, Unesp. Campus de Rio Claro. Av. 24A, 1515, Bela Vista, 13506-900 Rio Claro, São Paulo. Brazil

e-mail: lmarcelo@rc.unesp.br

H.A.L. de Souza

Departamento de Educação, Instituto de Biociências, Unesp, Campus de Rio Claro – Av. 24A, 1515, Bela Vista, 13506-690 Rio Claro, São Paulo, Brazil

e-mail: helu souza@hotmail.com

western democracies have witnessed the ongoing development and consolidation of education for citizenship" (p. 227).

Nowadays, perhaps more so than at any other historical time, educational policies have prioritized the social aspects of education (Arbués 2014). Among these social aspects, the trend of developing and consolidating citizenship education in different countries has been made clear since the end of the last decade of the twentieth century. According to Arbués (2014), the fall of the Berlin wall and the hard-hitting criticism of extreme liberalism, which began at the end of 1980s in the United States and Canada, had repercussions in European countries. Educational orientations in France in 1999, in England in 2002, in Germany in 2004, and in Italy and in Spain – around the same period – can be seen as example of these policies mentioned by Arbués (2014) that have been incorporated by the European Council. According to this author, in these countries, educational policies have both emphasized the personal dimension of human beings, the achievement of individual liberties, and, at the same time, the social aspect of communities.

According to Bannell et al. (2011), beginning in the 1990s, the concept of citizenship became central to both political and educational theories, particularly concerning human rights. Such interest, although visible in different social spheres, has been implemented in different curriculum documents in various countries, such as those already mentioned in Europe, but also in North America (United States and Canada) and South America – see, for example, the Curricular Proposals in Brazil since the end of the 1990s (Bannel et al. 2011).

However, as Bannel et al. (2011) indicate, "the concept of citizenship presupposed in those documents is not explicit" (p. 7) – and the official documents that deal with the objectives and purposes of education in Brazil were not exception. This, in turn, raises doubts concerning the possible relationship between the educational process and citizenship education:

Why have educational reforms in recent decades placed education for citizenship as a main objective of basic teaching in so many countries, including Brazil? Which concept(s) of citizenship are these reforms based on? Is the new discourse of citizenship an ideology in favour of the dominant classes' interests or is it part of a mobilization in favor of human emancipation? (...) why has the category of citizenship become the main focus of the philosophical liberal policy over the last two decades? (Bannell, Prata and Fenerich 2011, p. 7)

According to Valle (2010, p. 214), the emphasis to relate education and citizenship that could be taken as a "new demand," in fact, correspond "to a real return to the origins" of the educational practices. According to the author, the first and also the most constant meaning attributed to education, since education started to be seen as a social practice, was to educate "future citizens" (p. 214).

Taking into account the Brazilian context, Gallo (2010) considers that the ideal of citizenship "has always been tenuous, riddled with controversies and contradictions" (p. 133). According to the same author, after the country went through two decades of military right-wing dictatorship, "the last decade and a half has been marked by the discourse of the construction of citizenship" (p. 134). In this discourse, education is always remembered as playing a key role in this process. However, in order to make informed choices, coherent with their political

orientations, educators in general and researchers in particular should make it clear which citizenship and which education they are talking about.

The community of researchers and educators in EE has not spared themselves from taking part in this debate or from bringing concrete contributions to this meaning-making process in education and citizenship. Environmental education, according to Jacobi (2005), for example, should be placed in a broader context, namely, education for citizenship itself and understood as a practice that is "decisive in the consolidation of citizen–subjects" (p. 243).

Loureiro (2011) understands EE as being a constituent part of the social/environmental movement, which mainly focuses on relationships between human beings (society), nature, and the process of constructing planetary citizenship. To this author, planetary citizenship or ecocitizenship is a new concept:

[It expresses] the inclusion of ecological ethics and its consequences in everyday life in a context that enables individual and collective awareness of local, community and global responsibilities, having respect for life as a central axis and defending rights to it in a world without geopolitical boundaries. Doing so, the feeling of belonging to humanity and to a single planet is a key idea In this concept. (Loureiro 2011, p. 80)

In an international context, Scott (2011) explored research studies and general literature regarding school practices and contributions to "young people's learning about living on the planet both sustainably and well" (p. 409). The author concludes that "the priority must be to engage young people with ideas about sustainability through imaginative teaching strategies that provide stimulating opportunities for learning, including practice in **citizenly engagement** – and that everything else has to be secondary to this" (p. 409; bolded emphasis added).

To provide an idea of the centrality of citizen/citizenship in the EE discourse on an international level, a search of articles published since 1997 in the journal *Environmental Education Research* (EER) returned 453 matches. In a Special Issue (SI) recently edited by this journal (volume 21, issue 3), whose theme was explicitly linked to the role of EE regarding the political dimension of education ("environmental education in a neoliberal climate"), the editorial team stressed the relationship between EE and citizenship (Hursh et al. 2015). Therefore, certain papers included in this special issue address the relationship between EE and the construction of citizenship as an intrinsic and inherent function of education itself.

According to Dimick (2015), for example, "developing students' civic capacities and dispositions to engage as participatory citizens in relation to environmental issues and concerns" (p. 390) should be an educational aim of EE. In the same direction, Stahelin et al. (2015) recognize the emphasis that we can find in the Brazilian EE context linking EE "to the formation of citizen–subjects capable of critically reading socio–environmental realities and mobilizing collectively to intervene// in transformative ways to overcome social injustice" (p. 437).

In 2014, the Brazilian Journal of Research in Science Education published a special issue with the title "Environmental discourses in science education: Contributions to democracy, citizenship and social justice." As clearly shown in the title of this special issue, this publication considered citizenship as a key concept involved in EE. According to the editors, "current discourses of democracy, citizenship and

social justice are increasingly recognized as being amongst the many existing factors with which education interacts as a means to assist society in the development of scientifically and ecologically literate citizens" (Reis and Oliveira 2014, p. 11). Several papers published in this special issue specifically address the links between EE and citizenship by exploring different pedagogical strategies. For example, Wolmann and Braibante (2014) report on a teaching experience in which they encourage high school students to prepare informative leaflets related to EE. Conrado et al. (2014) explore teaching strategies based on problem-based learning (PBL), which "may contribute to the education of responsible citizens in social and environmental contexts" (p. 80). Moreover, Cosenza et al.'s (2014) research aims to understand how in-service teachers discursively articulate certain science education goals, especially those concerning the relationships between science, society, and citizenship, with environmental justice and risk (p. 90). Finally, through the analysis of similar research reports that have linked EE and science education, Santos et al. (2014) pointed out trends regarding the political dimensions emphasized by the authors in those texts. Although their results have shown that citizenship is one of the most stressed aspects related to the political dimension of EE, they have concluded that there is a need to clarify the meanings of the political dimension of EE in general and the relationship between education and citizenship.

As the articles above indicate, the relationship between education and citizen/citizenship is frequently emphasized in EE research reports and EE theoretical reflections in Brazil as well as at the international level. According to Higuchi and Moreira Júnior (2009), what researchers envision is the possibility of rapprochement between the assumptions that guide the educational practice of EE with research practices.

There is no room for naivety. There are great risks of inconsequent spontaneism and pragmatism when we face the real meaning of the political dimension of EE education, particularly in regard to citizenship. There seems to be no alternative other than attempting to understand such proposition in more depth. As Valle (2010) suggests, the "analysis of the philosophical or historical meanings which can be attributed to the notion of citizenship [is] an essential task for education" (p. 219).

With this regard, it is reasonable to argue that the term "citizenship education" carries a variety of meanings and understandings that depend on a number, including the ontological, epistemological, ideological, and political perspectives of scholars and educators. As Reis and Oliveira (2014) point out, it should be considered that educators, including us, "struggle with competing and ideologically disparate concepts of not only citizenship, but also of democracy" (p. 20). Therefore, we hope that our reflections may take part in that "real task which is the political, collective construction of this meaning" (Valle 2010, p. 219).

The broader issue that we have chosen to explore in this chapter is the role of EE in the citizenship education process in research reports or theoretical essays carried out in Brazil. As we have shared, although this perspective has been emphasized by the Brazilian community of researchers enrolled either in education or in the EE field, it has also been historically considered and explored by international researchers reporting in these areas. The questions guiding our investigation include:

Have environmental education researchers stressed aspects related to the relationship between EE and citizen/citizenship in their investigations? Has the EE research carried out in Brazil been designed in a way that helps to clarify possible relationships between EE and the process of citizenship construction? What aspects related to the EE–citizenship education relationship have been highlighted by researchers?

15.2 The Meaning-Making Process in EE and Citizenship Construction in Brazilian Research Reports

This chapter focuses on attempting to explore meaning-making processes surrounding the relationship between EE and citizenship education analyzing doctoral and master studies (research reports). If we consider those texts as a discursive genre and a discursive practice, they can be seen as constituents of the EE field and influential in the meaning-making process regarding such links between education and citizenship.

We believe that particular Brazilian studies may constitute significant contributions to foster, as proposed by Bakhtin (2010), a dialogical attitude, a relationship with the other. Only this dialogical attitude among researchers and educators all over the world can bring to surface different utterances, which constitutes a link in an endless chain of utterances regarding key concepts to the EE field at the international level.

We have systematized possible meanings attributed to the relationship between EE and citizenship in theses and dissertations on environmental education carried out in Brazil. The documents analyzed were selected from the database organized by the EArte Project team, an interinstitutional research group that has developed a broad research project in the EE field.

In addition to gathering all EE theses and dissertations concluded in Brazil since 1981 – from the first master's EE study produced in the country – at national level and as extensively as possible, the mentioned EArte project aims to organize a database in which all these research are catalogued. Other objective of this research project is to analyze some particularities regarding institutional, regional, and educational contexts, such as universities, postgraduation programs, and Brazilian's regions in which theses research were carried out. The project's website (www.earte. net) gives access to the Thesis and Dissertation Database and offers a panoramic view of the project, including the history, objectives, and the selection and classification criteria used to select the EE theses and dissertations included in the database.

In terms of methodological approach, our starting point is that research reports are not a picture of reality, but rather results of discursive interactions, links in a verbal communication chain, and answers to concrete utterances already produced and that will probably stimulate other utterances (Ferreira 2002). Considering this, we cannot utilize data reported in research as reliable records of reality, but as the results of a look at reality with plenty of intentions (Martins 2006). According to Payne (2009), the aim is that the analyses of EE research can contribute to our

understanding of research texts as part of the process of construction of discourses about EE. It is a way of clarifying the meanings that we have constructed about these educational practices and, thus, our understanding of their identities, as a field of educational practices and research.

Considering the abstract of a thesis or a dissertation as an autonomous text and a means with its own particular characteristics or, in other words, a discursive genre (Bakhtin 2010; Ferreira 2002) considers justifiable and appropriate that we take these texts and analyze them in terms of state-of-the-art approaches in a given academic production. Taking abstracts as discursive genres means considering these texts as having been produced for a "determined purpose" and "under specific conditions of production" (p. 267). In Bakhtin's dialogical perspective, each abstract participates in the "verbal communication chain" (Ferreira 2002, p. 270).

Considering these perspectives, we have analyzed the abstracts of the 3180 theses and dissertations that constitute the EArte database, trying to identify units of register and, from them, units of meanings regarding the relationship between EE and the process of citizenship construction.

15.3 The Ideal of Citizenship in Environmental Education: Theses and Dissertations in Brazil

Considering the total number of abstracts of theses and dissertations that constitute the EArte database (3180), 1780 of them (56%) refer to the political dimensions of EE. In addition, approximately 28,5% of those 1780 studies (n= 510) use the concept of citizenship to do so. In our analysis, we also tasked ourselves to recognize different nuclei of meanings regarding the relationship between EE and citizenship education from the analysis of the titles and abstracts of the theses and dissertations catalogued on the database of our choice (Table 15.1).

This panoramic framework shows that in 48.5% (n= 248) of the studies in which the term citizenship is found, its relationship with EE is assumed a priori. That is, there is no evidence that this issue has been problematized or critically studied in depth (Group A, Table 15.1).

In Subgroup A1 (35,5% of the total or n= 182), the term citizenship is incorporated into the text as a discursive resource to qualify the individual. In these research reports, the term citizen is used to refer to an individual or a group of individuals, such as "the students as a group of citizens." Taking this data into account, it seems there is no deliberate intention to politicize the EE discourse. In this case, the concept of citizenship or citizen is brought into the text to emphasize that individuals have the citizen status or are about to achieve that condition; citizenship is considered to be a result of educational practice, whether in a school context or not.

Those studies in Subgroup A2 (approximately 13% or n=66) also presented the concepts of citizenship or citizens as resources to qualify an individual's educational process. We found pre-indicators in those texts that referred the reader to political perspectives of EE, taking into account existing criticism of the dominant

Groups Subgroups Characterization **A**1 Citizenship as a resource to qualify the individual/subject of research. Α Concept of citizenship or the process of citizen education is not 35.5%b problematized 48.5%a Indication of political perspectives in EE studies. Concept of citizenship A2 or the process of citizenship education is not problematized 13% В R1 Indication that the relationship between environmental education and citizenship will be studied in depth in the complete text of the research. 51.5% 34.5% The citizenship and citizenship education processes are problematized in the text **B**2 Relationship between education and citizenship is a constituent part of the questions or objectives of the proposed investigation. EE and 17% citizenship or citizenship education as a research question

Table 15.1 Different nuclei of meanings regarding the relationship between environmental education and citizenship established by analyzing environmental education Brazilian theses and dissertations in the EArte database

epistemological paradigm, or critics related to the poor working conditions of those excluded from the current consumerist society. Thus, they point to the meaning of collective action, of diverse segments of society, such as those proposed by environmental movements. Another portion of the articles in this category propose discussing the role of developing social awareness about the process of waste reduction as well as other environmental impacts, such as air pollution, water contamination, and deforestation, associated with social justice and democratic sustainability. Finally, it is worth pointing out that eight of those studies refer to critical theory and to dialectical materialism and consider the relationship between environmental problems and the social, cultural, political, and economic dimensions of society.

In the second group of studies (Group B, Table 15.1), there are abstracts with indicators of problematization of the relationship between EE and citizenship (51.5% or n=262). In this group, there are two subgroups of studies: Subgroup B1 (34.5% or n=176) contains evidence that the relationship proposed was going to be further developed in the complete text of the research. Notably, seven studies clearly associate the citizenship process with other indicators of the political dimension of EE. For example, citizen/citizenship was directly associated with political participation, social and political commitment, social praxis, political education, democracy, community level of governance, shared management, and social and environmental justice, among others. The process of social and economic transformation or the transformation of economic systems and consumerism were also stressed.

The second subgroup of this set (17 % or n=86) is characterized by abstracts where the relationship between EE and the concept or process of citizenship is problematized as a research question. That is, this relationship is considered to be a research problem.

^aNumber (percentage) of master and doctoral studies (report research) in each nuclei of meaning groups

^bNumber (percentage) of master and doctoral studies (report research) in each nuclei of meaning subgroups

15.4 Education and Citizenship: Challenges and Perspectives in Light of the Environmentalist Discourse

The data analyzed enable us to address some counterpoints with the national and international literature that explores the relationship between education/environmental education and citizenship.

The first point that we would like to raise is the fact that our research results have made us alert of the current risk of trivialization and emptying of the concept of citizenship and of the political dimension of EE discourses. This risk is concrete when, in our research or pedagogical activities, the intrinsic relationship between education/environmental education and citizenship is taken a priori, without a proper clarification of its meaning (Santos et al. 2014). It is possible that the silencing of researchers and educators concerning the meanings attributed to the relationship between education and citizenship means the veiled adoption of a concept of citizenship of liberal inspiration. In this perspective, the central concern is for the individual rights, desires, or life projects as citizenship is primarily seen as a legal statute (Bannell 2010). In addition, it suggests that EE research and pedagogical discourses are very close to those in which the presumed subject-citizens are not real people. As Stauffer and Rodrigues (2011) contend, in this case, subjects "are abstracted from their more entrenched interests, from their social conditions and from the ideological disputes present in society in order to cooperate with the concepts of justice and equity" (p. 36). Thus, it seems justifiable to accept Valle's (2010) proposal to consider our reality and concrete life conditions, making explicit not only what is meant by the word citizen in our countries today but, above all, what we believe any citizen should be.

Another challenging point that we face in the discourse on the role of education/ environmental education that has been constructed by researchers and educators lies in the necessary reaction to the influence of neoliberal policies. Many educators have made efforts to make the links between the neoliberal trend and education/ environmental education explicit in different contexts (see Hursh et al. 2015).

The neoliberal perspective imposes the principles of private and managerial initiatives on schools, which directly influences not only the aspects of administration and management of the educational system but also curriculum conceptions, political and pedagogical projects, teaching and learning, assessment, and teacher training, among others (Hursh et al. 2015). This tendency brings great difficulties in terms of planning and developing more open views to pedagogical practices, such as interdisciplinary practices. In other words, the neoliberal trend is being assimilated in such a way and to such an extent that we do not realize how much it restricts our thoughts, feelings, and our practices as educators and researchers (Hursh et al. 2015).

It is necessary to point out that in a significant number of Brazilian theses and dissertations on EE analyzed (approximately 300 documents) as well as in different papers and authors, some indicators clearly point to what might be called a reaction to this neoliberal perspective of citizenship. That is, there are signs of reaction at

attempts to construct false universalities supported by ideologies that mobilize interests of dominant hegemonic groups.

In all the literature to which we have referred, it appears that there is a certain emphasis to the possible relationship between the process of construction of environmental citizenship and the principles of environmental sustainability. In the case of theses and dissertations carried out specifically in Brazil, regardless of the group to which the research was associated, the terms "sustainable development" and "sustainability" are frequently used. However, the analysis of this set of research reports that we have carried out shows that there is also evidence that researchers are not all talking about the same kind of citizenship, the same kind of EE, or sustainable development or sustainability. This condition raises important issues for this debate. Hursh et al. (2015) explore the proposition by McKenzie et al. (Apud Hursh et. al. 2015) which, when examining the neoliberal policies of mobility, suggests that sustainability should be understood as a ""vehicular idea" in order to understand how the three cornerstones of sustainability are differentially contextualized" (p. 310). What interests us in this observation is the understanding of the variety of meanings attributed and constructed, in different contexts, about the idea of sustainability.

To a certain extent, this variety of meanings about the idea of sustainability could be a chance to understand that, even in contexts of globalization, particularities of environmental policies can generate distinct relationships between education and environmental issues. What we should consider, according to Hursh et al. (2015), are the various strategies of industrial capitalism in transforming the ideal of sustainability into eco-business or market ecology – i.e., the environment transforms into commodities as other possibilities to make profit. In such cases, the concept of sustainability is useful for creating values, for producing profit, always in the name of environmentalism and education.

15.5 Environmental Education and Citizenship: A Conflictive Field

More than an attempt to systematize and present conclusive statements, our intention is to finalize this chapter by emphasizing some provisional understandings about the historical and complex relationship between environmental education and citizenship.

Although our analysis is preliminary, it allows us to recognize that various researchers are taking part in a debate that is open to multiple ideological influences and complex meaning-making processes. Some indicators that we have systematized in this chapter clearly point to what might be called a reaction to the hegemony of the so-called modern and liberal concept of citizenship. Reactions against attempts to construct false universalities, supported by ideologies that mobilize interests of hegemonic groups, are clearly present in some of the theses and dissertations abstracts analyzed.

Our data also revealed how susceptible we are to generalizations and to decontextualized universalizations, supporting conservative or pragmatic perspectives in which the ideal of citizenship is founded on principles of liberal or neoliberal inspiration. This is the reality we face when we engage in environmental education: a conflictive field involving diverse interests, some of which are hegemonic and historically resistant to social changes. There is no room for naivety or poorly coordinated actions (Carvalho 2010).

As researchers and educators, it is important to recognize that we are involved in a context that is full of conflicting ideological interests. This reality, in turn, influences the formulation and the implementation of public policies in education/environmental education as well as knowledge production and dissemination.

Stauffer and Rodrigues' proposal (2011) is very significant when considering the contradictory social and historical nature of education. According to those authors, education is marked by materials and concrete conditions of the society to which it belongs, such as economic model, cultural traditions, or political experiences. It is also inserted in a context of tension that determines the struggles for democratization. The authors' proposition is to think not about education for citizenship, but about education of the citizen, who is seen as a real subject, "present, marked by socio–historical conditions, but not determined by these, or bound to these" (pp. 43–44).

Considering this proposal as a possibility to be constructed, new challenges are posed to associate concrete subject/subjects with the process of citizenship education. This project, which aims to construct autonomy and freedom, presupposes the articulation with other aspects of political practice. In Jacobi's proposals (2003), the idea is to construct a citizen who is a "founder of rights in order to open up new spaces for social and political participation" (p. 315), articulated to a context of constructing a democratic culture (Lima 2011).

Finally, it seems plausible to consider, as proposed by Hursh et al. (2015), that the field of education is always open to problematizing and questioning. If we agree with this statement, then the citizenship education process, always open to new questions, invites us to reflect and to struggle in contexts of broad hegemony of neoliberal ideologies.

Ouestions

Discussion questions that could help instructors and students to engage in meaningful conversation about the ideas presented in this chapter.

- 1. What, in your view, are the most significant characteristics of a citizen in our contemporary world? Are these characteristics universal or are there different perspectives of the characteristics or attributes of a citizen?
- 2. To what degree is the educational process required in the development of citizenship construction? In other words, what are the possibilities and limits of education regarding the process of citizenship construction?
- 3. Select three papers that in some way relate environmental education to the process of citizenship construction, published in different countries, and systematize the main ideas regarding citizenship conveyed by these papers

- 4. Compare the ideas that you can get from these papers with the ideas conveyed in the Brazilian journals systematized in this paper that you have read. Can you see any kind of approximation or differences between these papers from different countries?
- 5. What environmental education practices would you consider to be more consistent with your ideas and/or ideals of citizenship education?

References

- Arbués, E. (2014). Civic education in Europe: Pedagogic challenge versus social reality. Sociology Mind, 4(3), 226–232.
- Bakhtin, M. M. (2010). Estética da Criação Verbal. São Paulo: WMF Martins Fontes.
- Bannell, R. I. (2010). Pluralismo, identidade e razão: formação para a cidadania e a filosofia política contemporânea. In A. J. Peixoto (Ed.), *Filosofia, educação e cidadania* (pp. 155–207). Campinas: Editora Alínea.
- Bannell, R. I., Prata, R. V., & Fenerich, C. (Eds.). (2011). *Educação para a cidadania e os limites do liberalismo*. Rio de Janeiro: 7 Letras.
- Carvalho, L. M. (2010). Que Educação Ambiental desejamos? *Revista Ciências em Foco, 1*(3), 1–22.
- Conrado, D. M., Nunes-Neto, N. F., & El-Hani, C. N. (2014). Aprendizagem baseada em problemas (ABP) na educação científica como estratégia para formação do cidadão socioambientalmente responsável. Revista Brasileira de Pesquisa em Educação em Ciência, 14(2), 77–87.
- Cosenza, A., Freire, L. M., Espinet, M., & Martins, I. (2014). Relações entre justiça ambiental, ensino de ciências e cidadania em construções discursivas docentes. Revista Brasileira Pesquisa em Educação em Ciências, 14(2), 89–98.
- Dimick, A. S. (2015). Supporting youth to develop environmental citizenship within/against a neoliberal context. *Environmental Education Research*, 21(3), 390–402. https://doi.org/10.108 0/13504622.2014.994164.
- Ferreira, N. S. A. (2002). As pesquisas denominadas "estado da arte". *Educação & Sociedade*, 23(79), 257–272.
- Gallo, S. (2010). Filosofia, educação e cidadania. In A. J. Peixoto (Ed.), *Filosofia, educação e cidadania* (pp. 133–153). Campinas: Editora Alínea.
- Higuchi, M. I. G., & Moreira Júnior, W. (2009). Educação Ambiental e movimentos sociais: espacos paralelos ou compartilhados? *Pesquisa em Educação Ambiental*, 4(2), 165–174.
- Hursh, D., Henderson, J., & Greenwood, D. (2015). Environmental education in a neoliberal climate. Environmental Education Research, 21(3), 299–318. https://doi.org/10.1080/13504622.2015.1018141.
- Jacobi, P. R. (2003). Espaços públicos e práticas participativas na gestão do meio Ambiente no Brasil. *Sociedade e Estado*, 18(1/2), 137–154.
- Jacobi, P. R. (2005). Educação Ambiental: o desafio da construção de um pensamento crítico, complexo e reflexivo. Educação e Pesquisa, 31(2), 233–250.
- Lima, G. F. C. (2011). Crise ambiental, educação e cidadania: Os desafios da sustentabilidade emancipatória. In C. F. B. Loureiro, P. P. Layrargues, & R. S. Castro (Eds.), Educação ambiental: Repensando o espaço da cidadania (5th ed., pp. 115–148). São Paulo: Cortez.
- Loureiro, C. F. B. (2011). Educação Ambiental e movimentos sociais na construção da cidadania ecológica e planetária. In C. F. B. Loureiro, P. P. Layrargues, & R. S. Castro (Eds.), Educação ambiental: Repensando o espaço da cidadania (5th ed., pp. 73–104). São Paulo: Cortez.

- Martins, I. (2006). Dados como diálogo: construindo dados a partir de registros de observação de interações discursivas em salas de aula de ciências. In F. M. T. Santos & I. M. Greca (Eds.), A Pesquisa em Ensino de Ciências no Brasil e suas Metodologias (pp. 297–321). Ijuí: Ed. UNIJUÍ.
- Payne, P. G. (2009). Framing research: conceptualizing, contextualizing, representation, legitimization. *Pesauisa em Educação Ambiental*. 4(2), 49–77.
- Peixoto, A. J. (2010). Filosofia, educação e cidadania (3rd ed.). Campinas: Editora Alínea.
- Reis, G., & Oliveira, A. (2014). Environmental discourses in science education: Contributions to democracy, citizenship and social justice. Revista Brasileira Pesquisa em Educação em Ciências. 14(2), 9–26.
- Santos, W. L. P., Carvalho, L. M., & Levinson, R. (2014). The political dimension of environmental education into research of Brazilian journals of science education. *Revista Brasileira Pesquisa em Educação em Ciências*, 14(2), 199–213.
- Scott, W. (2011). Sustainable schools and the exercising of responsible citizenship A review essay. *Environmental Education Research*, 17(3), 409–423. https://doi.org/10.1080/1350462 2.2010.535724.
- Stahelin, N., Accioly, I., & Sánchez, C. (2015). The promise and peril of the state in neoliberal times: Implications for the critical environmental education movement in Brazil. *Environmental Education Research*, 21(3), 433–446. https://doi.org/10.1080/13504622.2014.994167.
- Stauffer, A. B., & Rodrigues, R. L. (2011). O liberalismo político de Rawls e a educação: qual a perspectiva para a formação do cidadão? In R. I. Bannell, R. V. Prata, & C. Fenerich (Eds.), Educação para a cidadania e os limites do liberalismo. Rio de Janeiro: 7 Letras.
- Valle, L. A. B. (2010). Modelos de cidadania e discursos sobre educação. In A. J. Peixoto (Ed.), *Filosofia, educação e cidadania (3rd ed)* (pp. 213–235). Campinas: Editora Alínea.
- Wolmann, E. M., & Braibante, M. E. F. (2014). Utilizando a elaboração de folders para a construção da cidadania com estudantes do Ensino Médio. Revista Brasileira Pesquisa em Educação em Ciências, 14(2), 265–278.