

THE CONTRIBUTIONS OF VISITS TO PROTECTED AREAS TO SCHOOL EDUCATION

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Introduction

Education is a right of every human being, essential for individuals to access the assets and services available, and so that they can enjoy their rights in a democratic society (GADOTTI, 2005). These processes comprehend three educational modalities: formal, non-formal and informal. Gohn (2006) states that the formal one consists in the education developed at schools, which are institutions regulated and organized according to Brazilian directives, concerned with teaching and learning contents historically systemized and normalized by Law. Non-formal education is characterized by intentional interactive processes occurring out of the schools, in informal places. Informal education, in turn, differs due to its non-intentionality, so as to occur in spontaneous environments (GOHN, 2006).

The function of the school is preparing students for exerting citizenship and qualifying them for work (PÉREZ GÓMEZ, 2000; BRASIL, 1996). Complementarity and the integration between school education and that occurring in non-formal spaces has been advocated by different authors, among whom, Gadotti (2005). In this scenario, the possibility of school visits to non-formal spaces contributing for schools to perform their role in forming the new generations has been historically recognized, especially in the context of criticism to traditional teaching.

Traditional teaching, discussed over the History of education and which Mizukami (1986) denominated “traditional approach”, encompasses, according to the author, a way of teaching in which the school is considered responsible for transmitting information from the teacher to the student, rather than creating or questioning. Lecture-based lessons and the teacher’s demonstrations to the class are the most frequent teaching methods, not emphasizing the construction of autonomy by students (MIZUKAMI, 1986).

Considering those characteristics of the traditional approach to teaching, the valorization of visits to non-formal spaces as a pedagogical strategy occurs in the con-

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text of seeking new approaches to teaching, which go beyond the passive reception of ready-made knowledge by students in the classroom. In the History of Education, the attempts to renew teaching are varied. The “tour lesson”, for example, which consists in visiting non-formal spaces (often natural), was developed by Freinet (1975) to stimulate motivation, enjoyable learning and to bring school and life closer. The author highlights enthusiasm, enchantment and joy of both teachers and students as regards conducting activities, aspects still currently valued in the activities in natural areas.

When performed so as to make students active, it becomes an alternative strategy to traditional teaching, being that school visits to natural areas have also been considered strategies to environmental education.

Although there is a legal definition of environmental education (BRASIL, 1999), there are different understandings regarding the theme and proposals for differentiating the approaches of environmental education. In one of these proposals, Layrargues and Lima (2014) identified three macro-trends towards environmental education: conservationist (concerned with sensitizing to nature and to the affective dimension), pragmatic (concerned with “sustainable consumption”, with “ecological footprint” and with waste recycling) and critical (presents a critical view on the fundamentals that allow for human being domination and the mechanisms of capital accumulation, as well as the quest for facing inequalities and socio-environmental injustice).

Considering the exposed, in the present article, it is understood that it is fundamental to promote critical understanding about the complexity of the environmental crisis in the environmental education processes and the engagement of individuals in the transformation of the mechanisms nurturing it, valuing participation, respect and sympathy, in consonance with that proposed in the critical macro-trend. From this perspective, the construction of sustainable societies is sought, in which, according to Sorrentino (1997), there are advances towards the improvement of the quality of life for everyone and not to the exploitation of human beings or of other species.

As stated by Queiroz and Guimarães (2016), conservation units, conceived not only as places for preserving ecosystems, but also as spaces for socio-environmental relationships historically configured, may be favorable to conducting field work concerned with environmental education. In this sense, the authors advocate that, besides environmental sensitization and interpretation, environmental education developed in these spaces should work on critical thinking and the feeling of belonging to the natural environment, so as to generate reflections and methodologies concerned with creating alternatives for solving environmental problems.

School visits to protected areas can also be opportunities for conducting practical activities, which, as Andrade and Massabni (2011) defined, are those in which students have a direct experience with a physically present material, a phenomenon or raw data deriving from the natural or social world, such as the study of the environment, experimentation and “visit with observations”. In these activities, there is the possibility of investigating and questioning the students’ previous ideas (promoting conceptual changes), studying the natural phenomena interdisciplinarily, creating new thoughts and attitudes, as well as arousing the students’ interest in Science (ANDRADE; MASSABNI, 2011).

In the visits to natural environments, interpretive trails are highlighted as a methodological strategy for environmental education (TABANEZ et al., 1997; VASCONCELLOS, 1998; GUIMARÃES, 2010). Guillaumon, Poll and Singy (1975) say that interpretive trails are tracks in natural areas whereby direct contact with nature and explanations on the environment are created.

School visits to protected areas

School visits to protected areas have already been focused by some researchers. Analyzing the guided school program of the Estação Ecológica de Caetetus (Caetetus Ecological Station), located within the State of São Paulo, Tabanez (2000) verifies that in the aforementioned program there is strong emphasis on imparting information and on aspects of environmental conservation. The author also highlights that teachers consider the unit significant to environmental conservation, accessible to approach the environmental theme and a “laboratory to study, in practice, the concepts seen in theory” (TABANEZ, 2000).

Santos (2001), in a research on the educational practices in an Ecological Park, a Zoo, a State Park and an Experimental Station, questions the emphasis of school contents, especially on biological aspects, be it in the visits or in the formation courses offered in the protected areas. The author still emphasizes that, in the visits made to those areas, teachers seek a starting point or a complement to the class content, a support to school learning and consolidation of concepts, mainly in the Sciences discipline (SANTOS, 2001).

Also regarding the relation between the visits and the students’ learning, Silva (2014) states that, from an analysis of Pedagogy students’ conceptions on the conservation units, these spaces can contribute to knowledge learning by students due to their experiences, as well as to changing their attitude as regards relationships between human beings and nature.

From the above, the studies carried out are verified to indicate the importance of school visits to protected areas, as well as some weaknesses. However, there is the need to understand how these moments contribute to school education.

In this context, this article, which integrates a doctoral thesis, aims to analyze the contributions of school monitored visits to protected areas to school education, considering the conceptions and practices, both of teachers and of representatives of the protected areas involved in the visit.

The research track

The choice for the protected areas of the State of São Paulo to be studied occurred as from the responses to a questionnaire forwarded to those accounting for the protected areas administered by the Instituto Florestal (Forestry Institute) and Fundação Florestal (Forestry Foundation). We selected those that simultaneously met the following criteria: 1) receiving over a thousand school visitors a year in monitored visits; 2) being considered

by this research as high priority for the protected area, showing a perspective of continuity of the visits and of being interested in participating in the investigation.

Based on these criteria, we studied the school visits to a protected area of the Instituto Florestal, a small one within the State of São Paulo (area 1), which is not inserted in the Sistema Nacional de Unidades de Conservação (National System of Conservation Units) – SNUC (BRASIL, 2000) – and is not, therefore, a conservation unit. We also investigated a full-protection conservation unit (State Park) managed by the Fundação Florestal and located on the coast of the State of São Paulo (area 2).

It is worth mentioning that the present research was approved by the Instituto Florestal Technical Scientific Committee (COTEC), the body responsible for managing the research projects in the protected areas of the State of São Paulo, and by the Committee of Ethics in Research with Human Beings of the university campus in the ambit of which it was developed.

For collecting the field data, we observed school visits in both areas and conducted interviews with three persons involved in the visit to each protected area: the manager, a technician that directly acted in the visits observed and a teacher that participated in the visit studied, totaling six interviewees.

The visits observed occurred with students from the Fundamental Level (for children aged from 6 to 14), one in the 4th year in area 1 and two in area 2 (one in the 5th year and another in the 7th year). An additional observation was made in area 2 because representatives of the protected area had told the researcher that a new project was being developed, with a different methodology from the one formerly observed.

The interviews were made after the Term of Free and Clarified Consensus had been celebrated; they were individual and semi-structured, a modality explained by Lüdke and André (1986).

The impressions and activities developed along the visits observed were recorded in a field diary. For ethical reasons, we opted for not disclosing the interviewees' identity or the names of the protected areas.

For analyzing the interviews, we conducted successive readings, highlights and annotations on the contributions of the school visits to protected areas to the teachers and students identified by the research participants. The analysis was centered in their recurrent ideas, similarly to the analyses supported on the search for focus of analysis. Recurrent words or similar sensations were identified to weave approximations on the meaning of these words in the segments under analysis.

After that, a discussion was made on each contribution indicated in the interviews, considering the data of the observations and relating the aspects found to the function of the school, as well as to theoretical frameworks of the education and environmental education areas.

The contributions of the visits to protected areas to school education

Those participating in the research reported different contributions from the visits to protected areas to both teachers and students. The social function of these areas of offering

students an experience different from their daily lives, especially to the low-income ones, was an aspect mentioned by the interviewees (all of them regarding protected area 1 and a teacher that visited area 2). According to them, several students have no opportunities of having tours with their families, not even to nearby places (as is the case of protected area 2, located a few meters away from the visiting school).

This point is made fundamental when it is evidenced that we currently live in a context in which, as stated by Henrique (2009), nature is increasingly more appropriate for the monetary prices of goods, such as real estate in condominiums, and restricted to a high-income population. According to the author, water, cleaner air, plants, animals and the other elements associated to the concept of nature are turned into luxury items and objects for the consumption of an elite (HENRIQUE, 2009).

Therefore, the possibility of students of all social classes, who usually live in the urban environment and have no access to natural spaces, to visit protected public areas is an important point. The opportunity of visiting those areas may contribute to the students' formation as citizens, once they are part of the public space, which must be known, valued and conserved.

Hence, considering that the access to protected areas is a citizenship right, that one of the major functions of school is citizenship formation (PÉREZ GÓMEZ, 2000; BRASIL, 1996) and that different interviewees highlighted the importance of the opportunity for the students to know these places, conducting school visits to protected areas is verified to be, in itself, an important contribution to school education.

These visits are also opportunities for developing practical activities. Andrade and Massabni (2011) state that a number of teachers do not use practical activities due to the concern regarding the students' safety and behavior. Therefore, the presence of team members of the protected area in the school monitored visits facilitates conducting these activities seeing that the teacher counts on support to manage the group of students at that place and for pedagogically explore the environment.

Furthermore, the teachers interviewed affirmed that the major contribution of their visits to them, as teaching staff, is to feel good in the places visited ("relaxing" and "feeling renewed"). During the interviews, they also stressed the fact of students being "happy" or "greatly enjoying". This feeling of wellbeing seems to be related to the fact that students are offered a pleasant activity, different from their day-to-day and which provides them with learning, considering the teacher's concern with the children global well-being, valued by Tardif and Lessard (2007).

From the results of the interviews and considering the solitary work of the teacher concentrated in the class (relatively closed spaces where teaching is impaired to students), discussed by Tardif and Lessard (2007), the school visits to protected areas are verified to contribute to teaching in the sense of providing the teacher with support to teach students in a practical activity. The contact with that environment, in these conditions, helps to reduce the weariness generated by exerting the profession.

From the opportunity provided by the visits, the central contribution emphasized by all the participants was "contact with nature", the "experience", the "practice". Analyzing the way these words and expressions were employed by the participants, they

are understood to correspond to the experience in the natural environment, highlighting sensorial experiences (observing the scenery, listening to animals, feeling the temperature).

In the observations made, this experience was verified to be offered in the tracks, this being the fundamental contribution of these visits to school education and the specificity of this educational space. During the tracks, the students could observe plants, animals, fungi, watercourses and other constituent elements of a forest. In the visit to area 1, these elements were not valued due to the predominance of the lecturing method and to the strictness of sticking to pre-established contents, such that observation, for example, was not stimulated. In the first visit observed in area 2, there was this stimulus by means of the dynamic adopted (competition in which the groups searched for artificial objects hidden in the track). The aim was that students observed nature, could contemplate it and discover “what is hidden”. It was not possible to assess if, after the visit, the aims had been met, but during the activity, the students showed to be attentive (an aspect also highlighted by the visiting teacher), seeking the non-natural hidden objects. In the second visit observed in area 2, the students were given binoculars to potentialize the visual contact, yet no activity was developed using them as pedagogical resources, and they were thus underused.

As regards the contact of children with natural environments, provided by the visits, studies have shown it can have a positive impact on the children’s lives. According to Chawla et al. (2014), who conduct researches on the theme in the United States, the contact with the natural environment can reduce lack of attention and aggressiveness, improve concentration, stimulate cooperation and reduce stress. Collado and Staats (2016), European researchers, affirm that the contact with nature improves children’s humor and cognitive functions, besides reducing the effects of the Attention Deficit Hyperactivity Disorder (ADHD) on children.

Regarding this experience, the interviewees related it to the capacity of arousing feelings and emotions in the visitors during the activities developed in the protected areas. In the interviews, most of those who participated in the research (except for the monitor in area 2) mentioned positive emotions and feelings stirred in the visits. Words and expressions such as “extasy”, “fall in love”, “sparkling eyes”, “excited” and “peace” were used.

We can affirm that in all the visits we observed joy and enthusiasm among the students, mainly when they saw animals (especially in area 1, where a group of monkeys and a toucan were spotted during the track), plants and fungi which raised their interest, as well as when they found the hidden objects during their first observed visit to area 2. The observation allowed verifying that this pedagogical practice enabled the visits to be pleasurable moments for the students, particularly during the tracks.

To understand the importance of these feelings and emotions aroused, let us highlight that the school, as an institution, has apparently historically privileged objective aspects and specific knowledge, without considering emotions, which also integrate human formation. In this sense, when Freinet (1975), proposed the “tour class”, he criticized the lack of attention to these aspects in traditional teaching. For him, the manual, artistic and scientific types of intelligence need not only ideas, but creation, work and experience, too,

making practice fundamental (FREINET, 1975). The importance of the tracks to arouse feelings and emotions is mentioned by Guimarães (2010), as well as the possibility of the studies on the environment to produce the “sense of wonder” discussed by Lestinge and Sorrentino (2008). Once these sensations can be provided by the experience in the protected areas, a visit to these areas is observed to be able to complement formal education regarding not only cognitive aspects, but those concerning emotional and affective issues.

Those feelings and emotions aroused in the visit may contribute to learning school contents. When studying the teaching work, Tardif and Lassard (2007) highlight the interactive aspects of teaching and explain that teachers, to perform their teaching role, also have to instill enthusiasm in students to get them involved in the tasks. Future studies may be developed to analyze whether these visits allow teachers to find moments that can be retaken in the classroom, which, due to the students’ enthusiasm, facilitate the learning of certain contents, for example.

This possibility of experience, according to the manager of area 2, makes it possible for students (and for other individuals), from observation, to construct learning that goes beyond school contents, such that they may also start teaching the people that offered them this opportunity, such as their very teachers and the conservation unit team. In this sense, the manager of area 2 told that, during a visit, a teacher explained about fungi and lichens and, with a book in hand, told the children the name of the lichen they were observing, comparing it to the book illustration. However, a student disagreed on the identification of that fungus and explained the characteristics differentiating the fungus they were observing in the environment from the book illustration.

The interviewees also mentioned other contributions of the visits to the students, such as increase in concentration, perceived in the activities conducted in the visits, the opportunity of knowing new fields of professional activity (in the Biological Sciences area) and possibilities of differentiated activities for the children in the neighborhood, so as to contribute for them to keep away from drugs. Let us highlight, however, no further information on this issue of knowing new professional fields were surveyed or the influence of the visits on facing the drug problem. Hence, researches can be developed to analyze the hypotheses of those contributions.

Different interviewees also pointed out that that these experiences of contact with nature help students to “absorb”, “fix” the content they are learning; they also take these experiences “for life”, since they “make an indelible mark”. As regards the theme, no information was found on researches that had studied it among the memories of students’ visits to those areas or its influence in future life. It is thus not possible to analyze whether this idea of a visit “making an indelible mark” indicates an overestimation of the visit or not. The impacts of these moments on the students’ lives, including their choices and conceptions, could also be the target of investigations in future works.

A point to be mentioned, however, on the issue of new professional fields and about its being an experience to remember, is that all the representatives of the protected areas interviewed reported on the relevance of their experiences of contact with such areas in their childhood, as a dwelling place or for leisure, and affirmed that this kindled their interest on the area and influenced their professional choices.

Most interviewees (except for the monitor in area 2) also indicated the contribution of the visits regarding the knowledge acquired by the students. Concerning the relationship with the contents of the school curriculum, both teachers reported situations in which this relationship was established, both because, in the visit, a subject already explained in class was broached and the students remembered the visit during a lesson taught at school about a certain content. This aspect of the help of the visits to understand themes worked on in the school context is also approached by Tabanez (2000), Santos (2001) and Silva (2014).

However, in the three visits observed, we identified conceptual imprecisions and shallow explanations; the pedagogical practice did not seem the most adequate for acquiring knowledge during the tracks conducted in area 1 or in the second visit observed in area 2, as the information was presented orally, as in a lecture, quickly and superficially.

In the visit observed in area 1, when a student asked, for example, about the reason for the fountainhead to dry out, the answer given was rather superficial, since only a natural factor (lack of rain) was provided, without considering the human action towards fountainheads, massive deforestation, bad water management, the values concerning water in our society (as a resource) and the many other issues regarding the theme. Moreover, no relationship was established, for example, among the fountainhead (observed at the beginning of the track), the water cycle (shown on a board during the track), the forest (the importance of which was pointed out in the presentation before the track) and the rain that started to fall during the track, which made everyone go to the Center of Environmental Education.

In a second visit to area 2, the monitor explained about some species found only to the students more physically close, since the narrow track and the students organized in a row hindered the access to the explanations to everyone.

Therefore, considering that a fundamental function of the school is to provide learning to students as regards socially and historically constructed knowledge (PÉREZ GÓMEZ, 2000), one of the ways for the visits to contribute to school education could be providing the learning of contents relative to the school curriculum or so as to complement it. However, the research showed that, despite the intention of teaching specific topics in the natural sciences area to the students, the contribution of the visits concerning knowledge is restricted, once it is centered on punctual and non-contextualized oral information.

For potentializing the contributions of the visits concerning knowledge, the investigative aspect can be relevant in the pedagogical practice developed, depending on the aims of the visits and on the different audiences. Libâneo (2008) highlights the importance of studying the environment for learning the content within its context, by investigating concrete problems. Andrade and Massabni (2011) emphasize that the students' investigative posture in practical activities may foster interdisciplinary studies and questionings about previous ideas, besides kindling new ideas and attitudes, arousing the students' interest in Sciences.

Therefore, teaching methods that stimulate observation, collection, analysis and discussion of data, in a dialogue with elaborate knowledge are understood to be possible ways for potentializing the contributions of the visits, so as to value the specificity of the

educational space, involving students in the construction of knowledge from practice, and stimulating reflections on the importance of conserving protected areas and on environmental awareness.

In this context, when asked about what he could suggest bridge the gap between the schools and the conservation unit teachers, the monitor of area 2 suggested conducting research work with the students, who would be “scientist citizens” and “[...] Making them feel the need of searching for further answers within this environment, within the units [...]” (monitor of area 2). He also stated that the unit team intends to better develop this idea to propose it to the Municipal Education Secretariat in the next year.

Another point to be mentioned is the importance of playfulness, especially in school visits with children. This aspect was approached by the person in charge of area 1 and by the visiting teacher at that unit, who suggested including “games” in the tracks. Also observed was that the playful-educational activity used in the first observed visit to area 2 aroused the students’ interest, their concentration and observation during the track, while looking for non-natural hidden elements, besides stimulating group work.

The importance of playful-educational activities in natural environments, especially with children, is advocated by Cornell (2008), who developed “games for nature”, which aim to provide joyful moments and of contemplation of the natural environment. From the perspective of the present work, playful-educational activities are understood to be possibilities of valuing the specificity of the educational space and, if integrated to critical reflection processes, of playing an important role in the pedagogical practice in protected areas.

The representatives of the protected areas studied also stressed understanding the importance of protected areas and their conservation as an important contribution of the visits resulting from the contact of the visitor with the natural environment and of the knowledge on its benefits (regarding water, air, microclimate etc.), this role of environmental education in conservation units has been approached in a number of normative documents in Brazil and in the State of São Paulo (BRASIL, 1999; BRASIL, 2006; BRASIL, 2011; SÃO PAULO, 2008; CERVANTES et al., 1992).

To perform this educational role, it is necessary to approach the importance of these areas and of their conservation considering the different dimensions of the socio-environmental issues, including political, social, cultural and economic aspects, besides stimulating the participation of individuals in social transformation through individual and collective actions and their co-responsibility, as provided in the “Directives for the National Strategy of Communication and Environmental Education in Conservation Units” (ENCEA).

Another way for the visits to protected areas to contribute to school education could be developing environmental education, whose importance in schools is acknowledged in a number of normative documents (BRASIL, 1999; 2012) and in a number of researches on environmental education at school (LOUREIRO, 2007; PALMIERI; CAVALARI, 2012; TREIN, 2012, among others). The contribution of the visits to understanding the importance of conserving the environment and of environmental awareness was pointed out by all the participants.

Analyzing the contributions they presented, they are observed to focus on sensitization towards nature and its preservation, as well as changes in individual behaviors concerning environmental conservation (reporting mistreatment and capturing animals, discarding waste correctly etc.), characteristics that bring these conceptions closer to the conservationist macrotrend of environmental education, criticized by Layrargues and Lima (2014).

It is thus a vision that disregards the fact that environmental degradation is not caused by a “generic” human being, but that it results from social relationships constituted and constituting a means of production based on a spoiling and unsustainable development model, characterized by inequalities of access of the different social segments to natural resources and to produced assets (GUIMARÃES, 2011).

According to the National Curricular Directives of Environmental Education – DCNEA (BRASIL, 2012), environmental challenges have to be approached from a critical and transforming perspective, in the local, regional and global dimensions. Furthermore, individual and collective participation in environmental issues should be stimulated, understanding environmental quality as a value inseparable from citizenship.

However, despite all the interviewees having emphasized that the visits to protected areas are ways of developing environmental education, the environmental theme was hardly worked on in the visits, seeing that they focused on transmitting information on species and elements of the place. When environmental education was approached in the pedagogical practice, it neared the conservationist macrotrend criticized by Layrargues and Lima (2014), because the environment was not approached in its multiple dimensions. The causes and consequences of environmental problems (such as the development model and the values of the current society) were not worked on and social participation was not mentioned. An example occurred in the first visit to area 2, when the problem of hunting and capturing animals was approached, focusing solely on the physical suffering and on the loss of freedom by the animals, with no reflection on the economic, social and cultural causes of hunting and capturing animals, or their impacts on the environment.

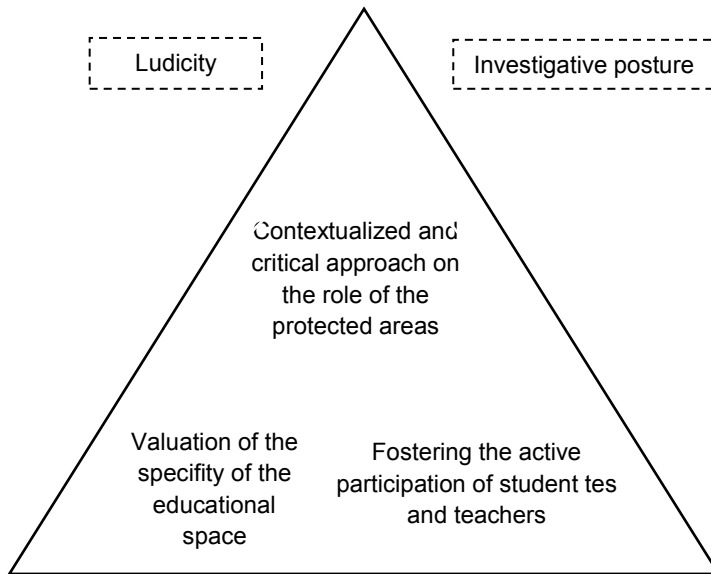
From this research results, for a critical approach to environmental education, overcoming a descriptive approach of the species present in the space is verified to be paramount. This perspective allows observing that it is possible to work pedagogically, in a contextualized and critical way, on the role of these areas, so as not to wait for it to be understood solely by the fact of students and teachers visiting the place and receiving disconnected information about some of the elements present there. The protected areas must be understood in their social, economic, ecological, cultural and political contexts, so as to stimulate reflections on the values and on the current development model, relating the role of these areas with local, regional, national and global issues as preconized by ENCEA (BRASIL, 2011). It is thus important to stimulate the participation of teachers and students in this educational process, such that it is not restricted to the monitors’ explanations to the group, but seeks to stimulate the engagement of the visitors in the creation of sustainable societies, in which to advance, as proposed by Sorretino (1997), towards the improvement of the quality of life for everyone rather than exploiting human beings or the other species.

Considering that the visits are occasional, brief moments, there is not enough time for furthering the students' critical thinking on the social-environmental reality and the ways for its transformation. However, these moments may contribute to an environmental education process starting from the experience with the natural environment and by proposing some points to be discussed, such as the role of the units in an approach to the different dimensions of the environmental issues. It is thus fundamental for these visits to be integrated to educational processes at the schools. There are no ready-made paths or standardized procedures to be followed. Yet one can observe the importance of developing visit proposals that do not adopt the lecturing methods as predominant, but stimulate the participation of students and teachers, and which value the experience in the natural environment. It is hence fundamental to value the specificity of this space for experiences capable of causing emotions and feelings, developing knowledge and contributing to understanding the complexity of environmental issues, as well as the importance of social participation in the transformation of the social-environmental reality.

Participatory strategies for permanent and continuous assessment of the environmental education activities may subsidize this process for improving the visits. When developing strategies for assessing environmental education practices, it is important to seek to overcome a content or behaviorist assessment, recognizing the limits of the educational process in changing the objective conditions of life, and that many of the results are not quantifiable or long-term, conducting an assessment committed with a critical approach to environmental education, seeking not to induce results and having as a focus the continuous improvement of the educational processes (PALMIERI, 2011).

Considering the results and discussions herein, a schematic is proposed to highlight important pedagogical aspects for potentializing the contributions of school monitored visits to protected areas to school education. We understand it to be fundamental for the planning, development and assessment processes of these visits to consider three pedagogical aspects (Figure 1): valuating the specificity of the educational space, fostering the active participation of both students and teachers, and the contextualized and critical approach to the role of the protected areas.

Figure 1. Schematic of the pedagogical aspects proposed for potentializing the contributions of school monitored visits to protected areas.



Source: Elaborated by the authors.

In Figure 1, the triangular shape is used to present the three pedagogical aspects involved, from the results of this research, as fundamental for potentializing the contributions of school monitored visits to protected areas to school education, as each one of the vertices is essential to form a triangle.

The words in dashed rectangles correspond to those that may be important to the pedagogical practice according to the situations and to the audiences.

It is also worth remarking that school monitored visits to protected areas are merely one of the multiple possibilities of environmental education in those places. Therefore, it is important for them to be planned so as to integrate them to the other actions of environmental education developed in those areas.

Conclusion

Considering the conceptions and practices of those involved in the visit, school monitored visits are concluded to contribute to school education due to the opportunity of the visit (as a right and as a part of citizen formation), to the experience in the natural environment offered to students (which allows arousing feelings and emotions) and to the contribution to the teachers' work (as a support to conducting practical activities and the moment that contributes to reducing teachers' weariness deriving from exerting their profession).

Nevertheless, school monitored visits to protected areas have not been developed under the perspective of critical environmental education and their contributions are below their potential. For expanding and potentializing them, the protected areas governing bodies and teams have to fundamentally recognize that their educational role goes beyond transmitting information on the areas in occasional visits and encompasses educational processes concerned with transforming society, by including visits that value the specificities of these educational spaces, as well as fostering the participation of teachers and students in building knowledge and understanding of the role of protected areas in a contextualized and critical fashion.

Also recommended is creating strategies for involving teachers in the visits planning, development and assessment, integrating them in the educational processes developed at their schools.

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Original Article

THE CONTRIBUTIONS OF VISITS TO PROTECTED AREAS TO SCHOOL EDUCATION

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THE CONTRIBUTIONS OF VISITS TO PROTECTED AREAS FOR SCHOOL EDUCATION

Abstract: Studies show the importance of school visits in protected areas and some of their weaknesses. However, there is a need to better understand the educational role of these moments. Thus, the purpose of this paper is to analyze the contributions of these visits to school education, considering the conceptions and practices of those involved in the visitation. In this study, observations of visits were made as well as interviews with representatives from the areas and teaching of the visiting schools. Considering the role of the school, the visits observed and the conceptions of the visiting teachers and representatives of protected areas, it has been concluded that the monitored school visits contribute to the school education through the opportunity of the visit (as part of citizen training), the experience provided to the students in the natural environment and the contribution to the teaching work in a practical activity.

Keywords: protected areas, conservation units, environmental education, schools, visits.

AS CONTRIBUIÇÕES DAS VISITAS EM ÁREAS PROTEGIDAS PARA A EDUCAÇÃO ESCOLAR

Resumo: Estudos mostram a importância das visitas escolares em áreas protegidas e algumas de suas fragilidades. Porém, há necessidade de se compreender melhor o papel educativo desses momentos. Assim, o objetivo deste artigo é analisar as contribuições dessas visitas para a educação escolar, considerando as concepções e práticas dos envolvidos na visitação. Neste estudo, foram realizadas observações das visitas e entrevistas com representantes das áreas e professores das escolas visitantes. Considerando o papel da escola, as visitas observadas e as concepções dos professores visitantes e dos representantes das áreas protegidas, concluiu-se que as visitas escolares monitoradas contribuem para a educação escolar por meio da oportunidade da visita (como parte da formação cidadã), da vivência

no ambiente natural proporcionada aos alunos e da contribuição ao trabalho docente em uma atividade prática.

Palavras-chave: áreas protegidas, unidades de conservação, educação ambiental, escolas, visitas.

LAS CONTRIBUCIONES DE VISITAS A ÁREAS PROTEGIDAS PARA LA EDUCACIÓN ESCOLAR

Resumen: Estudios muestran la importancia de las visitas escolares a áreas protegidas y algunas de sus fragilidades. Sin embargo, hay necesidad de comprender mejor el papel educativo de esos momentos. Así, el objetivo de este artículo es analizar las contribuciones de esas visitas a la educación escolar, considerando las concepciones y prácticas de los involucrados en la visita. En este estudio, se realizaron observaciones de las visitas y entrevistas con representantes de las áreas y profesores de las escuelas visitantes. Considerando el papel de la escuela, las visitas observadas y las concepciones de los profesores visitantes y representantes de las áreas protegidas, se concluyó que las visitas escolares monitoreadas contribuyen a la educación escolar a través de la oportunidad de la visita (como parte de la formación ciudadana), de la vivencia en el ambiente natural proporcionada a los alumnos y de la contribución al trabajo docente en una actividad práctica.

Palabras clave: áreas protegidas, unidades de conservación, educación ambiental, escuelas, visitas.
