

Teachers Working in the Field of Environmental Education: Musings of a Practitioner

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Abstract

Over the last century, much was researched in the field of Education, be its educational policies or more effective learning strategies. It is only recently that studies have begun to focus on the teachers. This article describes an investigation about how the knowledge of teachers working in the field of Environmental Education is formed, transformed, and accessed. For this purpose, an ethnographical study of their narratives and practices was carried out. With the new century unfolding, it seems relevant to re-evaluate our learning purposes, as Education is considered to be an essential tool for the preservation of life on Earth. As teachers are privileged professionals in this process, elaboration of a new repertoire of professional teaching practices seems pressing.

Résumé

Depuis le siècle dernier, on a fait beaucoup de recherche dans le domaine de l'éducation, que ce soit sur ses politiques ou sur ses stratégies d'apprentissage plus efficaces. Ce n'est que récemment que les études ont commencé à cibler les enseignants. Cet article décrit une recherche sur comment le savoir des enseignants qui travaillent en éducation environnementale est formé, transformé et transmis. Dans ce but, on a conduit une étude ethnographique de leurs récits et de leurs pratiques. Avec le nouveau siècle qui débute, il semble pertinent de réévaluer nos intentions en apprentissage puisqu'on considère l'éducation comme un outil essentiel pour la préservation de la vie sur terre. Et comme les enseignants sont des professionnels privilégiés de ce processus, l'élaboration d'un nouveau répertoire de pratiques professionnelles en enseignement semble presser.

The Beginning of the Story

"Would you tell me, please, which way I ought to go from here?" asked Alice.

"That depends a good deal on where you want to get to," said the Cat.

(Carroll, 1978, p. 75)

I usually say I *was born* an educator. As my parents' first child, I gave them the experience of being the father and the mother of a girl in Brazil in the 1960s, during the century that has just ended. I was also the grandchild-that-lived-in-the-city for my grandparents, who were small farmers in Rio de Janeiro State countryside. When we visited them, I used to bring "the city news," such as songs, which my grandmother greatly enjoyed. In the evening, sitting by the kitchen wood stove, the main source of energy in the region at that time, we listened to tall tales and sang. Since then, both stories and songs have played an important role in my life. Besides, it was then that I learned with my grandmother not only how to make fire but also something that today I consider one of the most relevant skills of an educator: to care.

In my country they say teachers have an inborn vocation. However, we know teachers have to work hard to become good professionals. They have a set of professional skills and talents that are used in their schools everyday so they can carry out their tasks (Tardif, 2000a). The job of a teacher is similar to that of a conductor, who leads the musicians of an orchestra to play the way he/she understands the piece. Just as conductors have music scores as their starting point, teachers have programs and objectives. As happens with conductors, it is the teacher that determines the ideal "pulse" of learning. The different groups of instruments in an orchestra are like the different groups of knowledge teachers have: the knowledge of the subjects they teach, the knowledge of educational principles and strategies, and the knowledge they acquire through personal experience. All of this knowledge depends on an inseparable duet—the "conductor" and his/her interpretation.

The knowledge teachers have is part of a life long story, because educators are always immersed in educational experiences. It starts in childhood and develops throughout their professional years. In other words, they are introduced to the world of education long before they become career teachers.

I have been a teacher for the past twenty years. I am aware of the historical moment we are in, I am conscious of how unpredictable (Perrenoud, 1993) and *complexus* (Morin, 2000) teaching can be and I am concerned about sharing with students, teachers, supervisors and with other subjects, assuming an *interdisciplinary discourse* (Fazenda, 1994). Researching has been an everyday activity of mine. I also try to include contents from different subjects in my classes when I consider my students my partners, because I have soon understood that, in school, as in life, there are diversified information nets, which are all extremely relevant and need to be linked.

Besides that, I have also learned with my family about the need of a new code of values, which would shape an ecologically balanced and socially fair society. In other words, I became a teacher that recognizes the complexity of life and of schools, who works with a wide range of information, and who defends the ethics of sustainability, the fundamental ingredients required to create free and creative citizens, as Gramsci (1968) once wrote.

Perhaps it was due to these characteristics (working with such ethical values, living *complexity*, and assuming an *interdisciplinary discourse*) why I have been “labeled” an environmental educator. But what does that mean? After all, what is environmental education about? Does a teacher working in the field of environmental education take into account the real world complexity? Does she or he understand the importance of joint action in the transformation of human relations and in the creation of sustainability?

And what about the development of teachers’ knowledge? What role do teachers’ personal lives play in such development? What influence does university have in the acquisition of information or in the development of knowledge and practice? How relevant is the knowledge acquired through experience? Is teachers’ present development sufficient to implement and develop environmental education in the Brazilian public school system?

Faced with so many questions, I cannot help but think of Paulo Freire (2000) again and recall what he has referred to as “epistemological curiosity.” Freire said that learning is a process that can trigger curiosity, which can go from a naive common sense attitude to an epistemological conscious curiosity, without which there can be no knowledge. As I have said earlier, I have always considered myself to be an educator, a curious educator. On trying to find the answers to my questions, I went back to study at university. And that is how the research I briefly describe now began.

The Research

The investigation focused on a public school in the southern area of the city of Rio de Janeiro, Brazil, where I was told by Professor Hedy Vasconcellos (1999) that teachers had been working on environmental education. An ethnographical study of their narratives and school practices was carried out. So, besides interviewing them to understand their narratives, which according to Bruner (2001) and Shulman (1986) express knowledge, I also observed their classes and actions for five months. I tried to find out about their sources, theoretical information, and practice in environmental education, as well as their social representations of environment. Observation focused mainly on three factors:

- the basic values of environmental education, which have been reduced to the conservation of nature and formally taught as a list of social and environmental problems caused by the action of human beings, according to Leff (1999);
- Brazilian environmental laws, which are clear but little known even to university students and teachers; and
- teacher development programs in environmental education in Brazil whose guidelines are confusing.

Some Musings

How can a part know the whole? I believe it is impossible to understand one without reaching the others, without penetrating the whole. (Pascal, 1979, p. 55)

Teachers have different groups of knowledge: the knowledge of the subjects they teach, the knowledge of educational principles and strategies, and the knowledge they acquire through personal experience (Tardif, 2000a).

The three teachers studied in the present work¹ did not consider their university courses as important as the so called “Normal”² course in the acquisition of the knowledge of educational principles and strategies. For Rosa, this period represented a bridge for the *who-always-wanted-to-be-a-teacher girl* to become a real teacher. She says she has improved teaching knowledge in many post-graduation courses and claims proudly, “I’ve never stopped studying.”

It seems that the group of knowledge rendered by experience plays a special part in the “orchestra.” In my study, experience has turned out to be the greatest teacher. In fact, teachers’ knowledge can only be understood within social relations, as it involves teachers’ and students’ motivations and beliefs. In the Portuguese language, we would say that such knowledge “tastes” like people. It is interesting to point out that in Portuguese *saber* (knowledge) and *sabor* (taste) have the same Latin etymology—*sapere* (Faria, 1994). Tardif (2000b) also shows that unlike what happens in other professions, teachers’ personal experiences, as well as their personalities and values are used as technological means in the classroom reality.

Teachers’ actions comprehend quite a varied scope. All forms of actions seek transformation. Their capacity to change the world depends on their capacity to change other human beings. However, as schools are historically the environment of human knowledge, it is there that it can be built, transformed, and conveyed. And because of the human essence of education, it may only be achieved through human action.

One of the stories told by Rosa is about a 12-year-old student who could not read at all after five years of formal schooling. He belonged to a class of older students who had failed many times. This group was a very difficult experience. “I left school crying many times, because students were very aggressive, they fought each other in class and I had to pull them apart, talk a lot about respect and these things to boys who weren’t respected in life,” she said. After some months things began to change. One day, for instance, she was told by a mother that the family was moving to another city and that her son did not want to leave school because he liked the teacher very much. He stayed at an aunt’s house in Rio de Janeiro and eventually learned how to read and write.

Such action of a teacher gives us the perspective of variety, which tells us that, although we are all human, each one is a unique human being (Arendt,

1975). Such action also requires that each one that is part of the process participates in it. It is, therefore, an integrated action that is articulated by the individual within space and time limits and that establishes social relations.

Also, teachers must understand human beings, in order to encourage them. Besides their capacity to understand, they must have the talent for caring. Rosa thinks her students learn better whenever she establishes a good relationship with them, which means being firm in setting limits and, with her eyes and voice, showing that she cares. Margarida says that she knows a teacher can make a difference to her students' lives. She values her "students' innocent eyes" and recognizes that "life is a constant series of discoveries."

During the research we understood that, because working improves as it goes, when it is done with care and fun it is a fountain of "crystal music." As Rosa put it:

... little by little, each one finds his way, you see. Mine is like this. I tease them, I make fun of them, they do it back to me, because if they don't have fun, if I don't have fun, it will be awful. If there's no fun, I'm out!

We can only understand teachers' identities if we relate them to the time in which their personal histories took place, if we relate them to their actions, projects, and professional development. It is similar to an orchestra in which the production of each instrument has a compass and depends on all the other instruments of the same group, as well as all the other instruments of the different groups, in order to play good music, light up our hearts, and teach us.

During the study, it became evident that the *habitus* (Bourdieu & Passeron, 1975) developed out of teachers' life experiences is a crucial factor for the development of professional identity. Their families valued education and they enjoyed school. They were exposed to values and practices that built up their personal and professional identity as teachers.

On the other hand, the absence of teachers' knowledge in environmental education was overwhelming. Teachers do not have basic information on environmental laws and have never been formally introduced to the basic concepts of environmental education—interdisciplinarity, complexity, and sustainability (Leff, 1999). Nevertheless, many times we saw and heard two teachers using these concepts in classroom activities. In other words, two of the three teachers from the school where the investigation took place are practitioners inspired by their ethical, political, social, economic, and environmental principles in a comprehensive approach to environmental complexity.

Rosa and Margarida seem to be aware of the historical moment we live in and work in a comprehensive approach to contents. Rosa is easy going. Margarida has found her own way to communicate with her students.

As for their social representation of environment, just two or three teachers do not reduce environment to nature. They seem to have unconsciously overcome the present tendency to reduce ethical values and environmental principles to just preservation, as Leff (1999) has pointed out. Rosa considers environment as “all the spaces of relations a human being has.”

The work in environmental education developed by these teachers seems to take place a little by chance and quite instinctively. Unfortunately, we lack real official efforts to implement environmental education in Brazilian schools. We believe such actions should start with clear policies for the development of teachers, “those responsible for the institutionalization of Brazil,” as Brazilian educator Anísio Teixeira (1999) used to say.

Lastly, I would like to share one of my recent conclusions: Aristotle said that *what distinguishes the-man-that-knows from the ignorant man is his capacity to teach*. Bernard Shaw, ironically, stated that *those who know act*, whereas *those who do not know teach*. In a study about teachers’ knowledge, Shulman (1986) rewords Aristotle’s and Shaw’s statements and says that *those who know act and those who understand teach*. I have used their ideas on teaching and have come to the conclusion that *those who integrate, know and teach*. As it happens with an orchestra, the knowledge of environmental teachers informs and forms simultaneously in a functional integrated process. Without integration, knowledge cannot exist.

Notes

- ¹ The three teachers’ names are Maria, Rosa, and Margarida.
- ² It is a traditional course which forms primary teachers.

Notes on Contributor

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References

- Arendt, H. (1975). *A condição humana* [The human condition]. Rio de Janeiro: Forense Universitária, 2000.
- Bourdieu, P. & Passeron, J.C. (1975). *A reprodução* [Reproduction]. Rio de Janeiro: Francisco Alves.
- Brasil. (1999). *Lei 9795* [9795 Brazilian law]. Brasília, MEC.

- Bruner, J. (2001). *A cultura da educação* [The culture of education]. Porto Alegre: Artes Médicas.
- Carroll, L. (1978). *Alice in wonderland*. London: Penguin Popular Classics.
- Faria, E. (1994). *Dicionário escolar Latino Português* [School Portuguese Latin dictionary]. Rio de Janeiro: FAE, 6^a edição.
- Fazenda, I.C.A. (1994). *Interdisciplinaridade: História, teoria e pesquisa* [Interdisciplinary: History, theory and practice]. Campinas: Papirus.
- Freire, P. (1996/2000). *Pedagogia da autonomia* [Pedagogy of autonomy]. São Paulo: Paz e Terra.
- Gramsci, A. (1968). *Os intelectuais e a organização da cultura* [Intellectuals and the organization of culture]. Rio de Janeiro: Civilização Brasileira.
- Leff, H. (1999). Educação ambiental e desenvolvimento sustentável. [Environmental education and sustainable development]. In M. Reigota (Org.), De Paulo (Ed.), *Verde cotidiano: Meio ambiente em questão* (pp. 111-130). Rio de Janeiro: de Paulo Ed.
- Morin, E. (2000). *A cabeça bem-feita* [A well-done mind]. Rio de Janeiro: Bertrand.
- Pascal, B. (1979). *Os pensamentos* [Thoughts]. Coleção “Os Pensadores”. Rio de Janeiro: Abril Cultural.
- Perrenoud, P. (1993). *Práticas pedagógicas, profissão cocente e formação: Perspectivas sociológicas* [Teaching practices, teaching profession and teachers’ development: Sociological perspectives]. Lisbon: Dom Quixote.
- Shulman, L.S. (1986). Those who understand: Knowledge growth in teaching. *Educational Research*, 15(2), 4-14.
- Tardif, M. (2000a). Saberes profissionais dos professores e conhecimentos universitários [Professional knowledge of professors and university knowledge]. *Revista Brasileira de Educação*, Rio de Janeiro no. 13, jan/fev/mar/ab, 5-14.
- Tardif, M. (2000b). *O trabalho docente, a didática e o ensino: interações humanas, tecnologias e dilemas* [Teachers’ work, didactics and teaching: Human interactions, technologies and dilemmas]. Rio de Janeiro: PUC-Rio. Texto distribuído no curso ministrado pelo autor no primeiro semestre de 2000.
- Teixeira, A. (1999). *Educação no Brasil* [Education in Brazil]. Rio de Janeiro: U.F.R.J.
- Vasconcellos, H.S.R. de (1999). *A saúde da criança carioca no ambiente escolar do primeiro grau* [Health of the carioca child at primary schools environment]. Relatório de Projeto Integrado [Research Report]. Rio de Janeiro: CNPq/PUC-Rio.