

## ENVIRONMENTAL COMMONS AS A CITIZENSHIP VALUE. AN EDUCATIONAL APPROACH TO WATER

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### **ABSTRACT**

*The aim of this paper is to consider the relations among three important factors: environmental resources, especially water, education, in particular geographical education, and citizenship. In fact, the challenge of educational policies is very important and conclusive for a sustainable environmental resources management, nowadays and in the future. With regard to water resource in particular, the theoretical and conceptual frames take into consideration the factors and values of water interaction, the relation between water and citizenship, and water in an educational way. If we examine educational policies of water resources, it is essential to assess the interaction between the values of water and the actual educational practices carried out in schools. Education about water and water practice are very important but they are not the same as the education of taking care of water. It is essential to learn how to take care of water or other environmental resources. The real difference concerns the ethical condition.*

**Keywords:** *environmental commons, water, active citizenship, geographical education*

"But the water, the air, the earth cry too. Nowadays the great pauper is the planet Earth that is oppressed by our consumerist logic [...]. After centuries of material culture, today we are longing for a simple and firm spirituality, based on the perception of the mystery of the universe and of the human being, on ethic of responsibility, solidarity and compassion, which finds its groundings on the care".

(Leonardo Boff)

## **INTRODUCTION**

This essay intends to propose some deliberations and reflections about the relations among three important factors: environmental commons, education, even through paying particular attention to geographical education, and citizenship. We could wonder what are the reasons of an essay that revolves around the interaction among those three factors. The main reasons relate to, on one hand, the unavoidable nature of an educational path in order to mature a responsible approach to common goods (such as air, soil, water, and forests) on different levels. On the other hand, we would suggest the importance of a serious geographical education, hence the contribution that geography can make in terms of the acquisition of responsible behaviours in the exercise of citizenship.

Generally speaking, despite the fact that the proposed reasoning could relate to any type of commons without distinction, herein the decision has been made to make an in-depth study revolving around the water resource, supporting the analysis by means of a short part of a typical research, built on the investigation on regional public firms concerned with water cycle management, to know their usual educational interventions. In fact, water represents one of the most important examples of the environmental commons group, so we decided to develop the thesis examining the water case.

However, it is worth underlining that the challenge of educational politics is very important and conclusive for sustainable environmental management, especially water management, nowadays and in the future. This paper includes three main sections: some preliminary and fundamental conceptual framework, some examples of water educational programmes, and some conclusive statements.

## **THEORETICAL AND CONCEPTUAL FRAMEWORK**

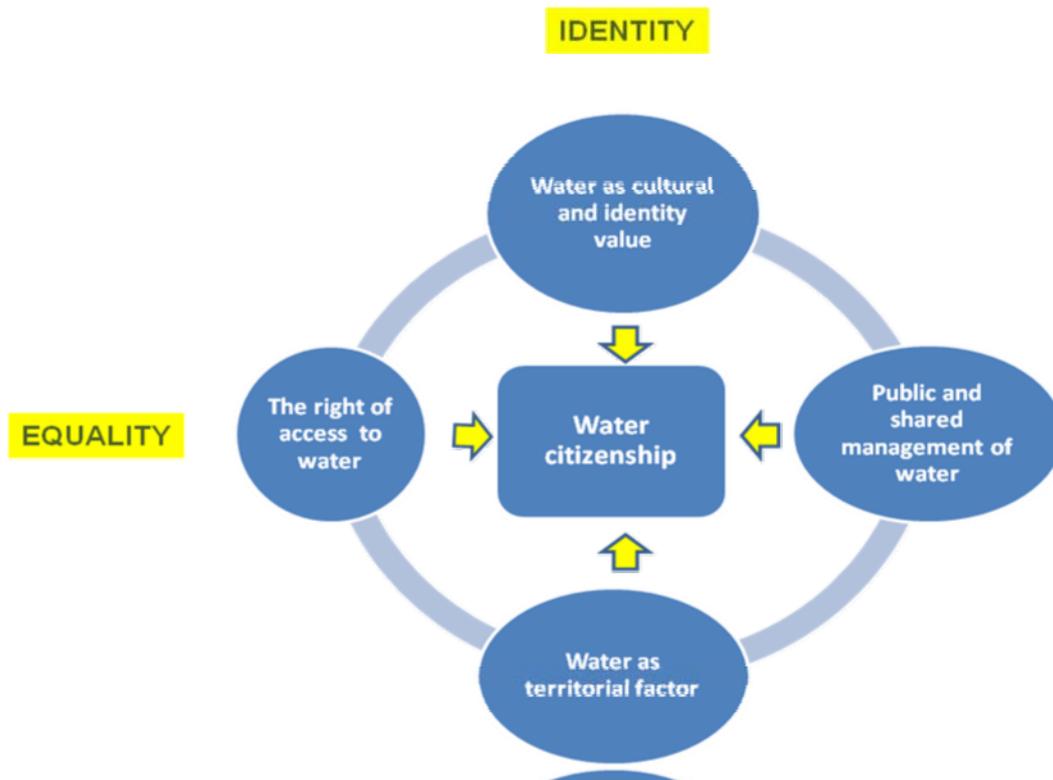
As a priority, we decided to proceed within a theoretical framework, which focuses attention on the factors and values/meanings of environmental commons. The second one analyses the relation between water and citizenship and the last one considers the water in an educational way.

The environmental elements refer at least to four essential factors or dimensions: nature, life, politics, and culture. In actual facts, every environmental resource can be understood if considered from four different perspectives, each one corresponding to the respective dimension. Assuming that an environmental common belongs to the natural sphere, it is a vital element and, at the same time, it supports the life of flora and fauna, it requires comprehension and a political plan. Eventually, it represents a

decisive factor in the construction of cultural processes. In addition, each factor/dimension involves at least one essential value, even if dimensions and corresponding values turned out to be intimately connected to one another, and the attempt to propose a differential interpretation almost on different levels, is not intended to obstruct a crucial systematic general outlook.

First, referring to natural elements, it appears of the uttermost importance to enable people acquire a great knowledge of the natural aspects of environmental resources. The right to live in a healthy environment (for water resources we may speak about the access to good quality water) is connected to what we value most in life. Democracy in terms of a high political value (democracy of water, soil, air and so on, intended as a democratic use of these common goods) and the essential awareness about the fundamental cultural meanings of environmental commons represent the last two couplings between factor/dimension and value.

However, if we consider these important values all together, expressed by or linked to environmental commons, we consequently have to imagine the strict connection between environmental commons and citizenship (Deiana, 2003, Brunelli, 2010). About this important link in the research work, we have decided to shift our attention only to the water issue, also because, among all the environmental commons, it is the more suitable for the educational field.



**Fig. 1.** Water and citizenship

*Source:* elaboration from Gagnon, Pagé, 1999

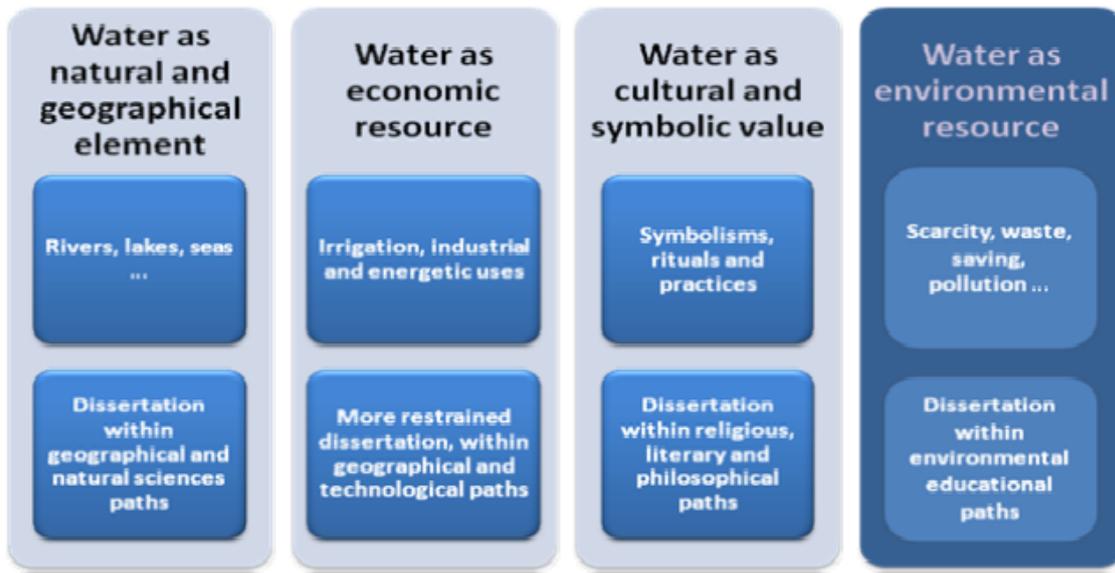
In order to introduce the consideration concerning water and its decisive role in terms of the construction of citizenship practices, we consider useful to suggest a theoretical frame, elaborated in the social and political sciences field, modified and properly adapted to the water citizenship issue (Gagnon and Pagé, 1999; Santerini, 2013). This scheme presents the dimensions of citizenship, related to two important principles: equality, placed on the horizontal axis, and identity, on vertical axis. Equality includes the dimensions of civil participation and the effective regime of rights, while the same identity processes and the social and cultural belongings make up the identity aspect. Here, the proposal is to apply the same frame to the water citizenship concept (Fig. 1).

Thus, we find the right of access to water and the public and shared water management as equality dimensions on an horizontal line; on the contrary, on the vertical axis, we find water as cultural and identity value and water as a territorial factor. It emerges the confluence between an interpretation focused on the conceptual axes ascribable to identity, equality, and the pluridimensional outlook that we formerly proposed, as evidence of the fact that environmental common goods, water in our case, represent some fundamental cores in the elaboration of sustainable citizenship practices.

## **WATER EDUCATION**

Talking about the educational politics of water resources, it is fundamental to consider the interactions among the four values or meanings previously defined – knowledge, right, democracy and awareness – and the actual educational practices carried out in schools. In actual facts, to elaborate some educational projects on the water resource, implies, and therefore should require, the simultaneous and integrated good offices of the above-mentioned values, thus making the separate or partial outlook not very practicable and, especially, inadequate as regards the educational action.

Consequently, by way of an example, somehow even with the awareness of making it strained, we have to consider separately the water educational directions, trying to identify, regardless of the different course of studies and schools, four main categories of topics, teaching addresses and study programmes: water in scientific and geographical approaches, water in economy, water as a cultural element and water as an environmental resource. The latter is rightly separated from the others because in general it is not a disciplinary topic, but a multi- or interdisciplinary aspect which involves the confluence of several fields of study (Fig. 2).



**Fig. 2.** Educational pathways about water resources

Nevertheless, although it is very important to analyse and study all water aspects, even if separated from one another, it is better to have a holistic approach and, above all, to consider the water resources as a good belonging to a community, both on the local and on the global level; and this approach surely requires awareness and citizenship practices (AA.VV, 2005; Giorda, 2011).

### **WATER EDUCATION EXAMPLES. THE ROLE OF THE INTEGRATED WATER CYCLE MANAGEMENT COMPANIES IN FRIULI VENEZIA GIULIA (ITALY)**

As educational intervention examples, we present some information about the water education activities promoted by the integrated water cycle management companies in the administrative region of Friuli Venezia Giulia (Italy). In the beginning, we will present the cases of Cafc (Udine district) and Hidrogea (Pordenone district), the two least rich and probably least effective on a didactic level. The main activities organised by these two companies include guided tours of the water plants, presenting the public company characteristics, and the elaboration of informative booklets, distributed to users and to the schools that require them. In general, it has a rather low impact on the pondering of self-aware behaviours, even though assuring an indispensable cognitive basis.

The second case is on the Amga, a water cycle management company in Udine town, more structured and didactically oriented. This public company offers three main types of activities: visits to the plants

(company office and automatic controlled centre; wells and waterworks basins; depuration systems of sewage water); lessons and/or explanations in schools, and another intervention focuses on publishing a didactic book about water issues, distributed to the students who visit the company plants (AMGA, 1994). However, even in this second case, a certain uncertainty remains about the efficacy of the informative action, despite the effectiveness of the formula, which proposes the combination between observation on the field and the introductory lesson in the class.

The third case is the Regional Water Resource Service proposal to schools. This represents an interesting modality to give an answer to the school needs. The regional service has opted for a propulsive role, which is at the same time a little marginal. In fact, initially the public service has the task to propose certain projects and encourage the participation of schools. Subsequently, it accepts the responsibility to carry out the external support to the paths undertaken by schools by means of elaborating teaching aids and materials (posters, booklets, PPT presentations, etc.) distributed to the schools that require them and a scientific, technical and economic support, for the carrying out of paths about the aspects of sustainability of water resources uses.

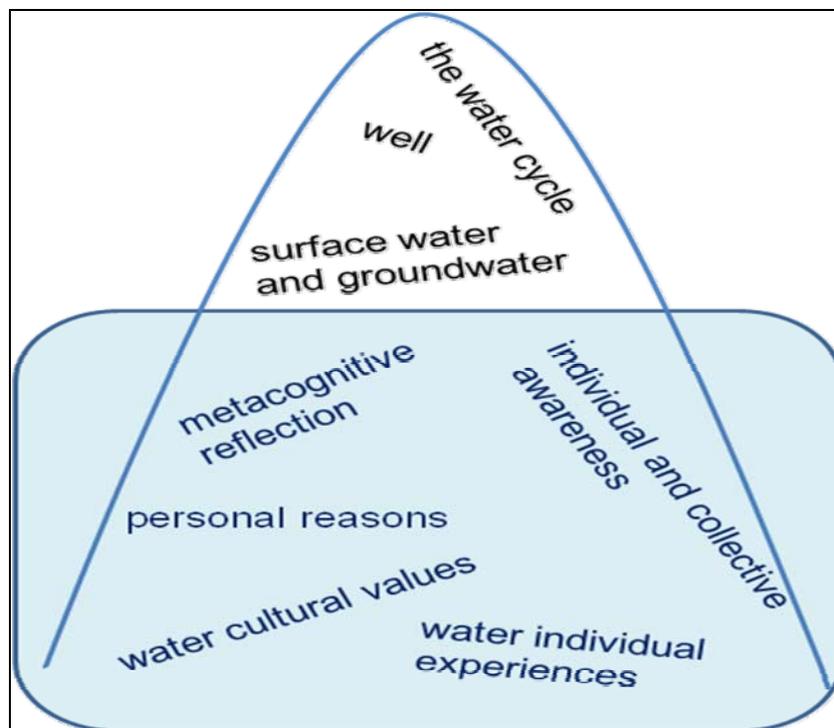
The last case study refers to Irisacqua, the water cycle management company in Gorizia town and its interesting philosophy of intervention, based on the complete freedom to schools for didactic plans. The company, thanks to the education and culture office of the Gorizia District, financially supports educational projects, which are created and carried out entirely and in an autonomous way by students under the supervision of their teachers. The latter example, since the main role is assigned to schools and their teachers, offers the possibility that projects may be much diversified, according to students' age and school typologies.

These examples, even if in a very concise way, pose the question of the perils that may come out of the relation between the school function (i.e. to acquire knowledge and skills, to take care of the growth in terms of skills, to mature awareness and to guide behaviours) and the expert boards' aims (i.e. just to inform, to make their company known, to take care of the technical aspects and to present the best of itself). The relation between the two levels is useful and it has to be cultivated but it should be improved as a concerted interaction, not as a delegation of powers by the school towards to municipal and district companies and towards to the specific sections of the regional administration that manage the water service. In conclusion, the school has to be fully aware of its need to be very independent in matters of education and it has to defend it strongly, even though trying to come to an agreement with water companies and their experts concerning information and popularization.

Some virtuous paths exist on paper, between school, no-profit organizations, and services for the management of the water system, like a didactic project, promoted in the district of Milan (Water Citizen, 2012), and they seem to be able to give a more suitable answer to the question previously presented, taking care to insert this project into a more

multidimensional education course of active citizenship. This proposal, for instance, is intended as a first step towards the development of a new water culture, conceived as a common good and a human right. This project is a part of the education of active citizenship, by means of the development of multidisciplinary paths that foster the choice of a sustainable and responsible lifestyle.

Another important aspect to consider for the success of water educational lessons planning and related paths refers to the awareness about the iceberg of the water competences (Castoldi, 2009). Teachers, and subsequently students, have to know and take in consideration not only the emerged part of the iceberg, but also, and probably in particular, of the submerged part (Fig. 3).



**Fig. 3.** The iceberg of the water competences  
(Source: elaboration from Castoldi, 2009)

For the efficiency of the educational practice, it is important that the plurality of dimensions must be mobilized. To the several dimensions connected to the strictly informative and cognitive levels, we must add and incite those concerning emotional-affective, metacognitive levels, which constitute the actual resources belonging to everyone.

## **CONCLUSIONS: IN ADDITION TO COMPETENCES, CARE**

In conclusion, education about water and water practice is very important, and safeguarding it even more so. It is essential to learn how to take care of water and other environmental commons, emphasizing, in particular, ethical values. It appears to be essential to support and revive the educational action, making use of the strengthening of the ethical dimension. This is because “[...] the common sense considers that the ethical commitment of education is essential. In fact, a formative activity that disregards the ethical intentionality cannot be considered proper education, but it is rather merely teaching and training” (Mortari, 2001, p. 95).

Formal schooling has its limitations and risks since it enables students to develop and increase their knowledge and skills but it does not instil an ethical dimension, which includes caring for the environment and adopting sustainable water practices (Noddings, 1992; Mortari, 2006).

It is very important to promote a new water culture, which should mean taking care of water in order to construct some guidelines for our lives (Mortari, 2008), and promoting the idea of the water resource as a discipline, or even a pluri- or inter-disciplinary subject as it actually presents itself. Research-education, in this field, is supposed to promote some reflection paths and reassessment that aim at a new water culture, because of an approach based on care.

The difference refers to the ethical conditions. In fact, according to Martin Heidegger, care is an “anguished worry”, but also “attention and devotion” through which we can become acquainted to things and living beings (Heidegger, 1969). So, caring is an ethically informed practice. In this case, care preserves, repairs and regenerates water, taking possession of some of the fundamental principles of the eco-centric model, as is promoted by deep ecology nowadays. Observing the world and studying it in different disciplines is not sufficient unless you feel part of it, without the conceit of feeling superior or being able to interpret it from a preferential external position.

Finally, taking care of water is the only way to achieve responsible citizenship that acts on water, with water and for water, thus testifying an ethical responsibility that cannot be ignored.

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