IN THE GARDEN OF "GEOGRAPHIC LITERACY"

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ABSTRACT

The association of pedagogical activity with the gardening is not a new one. Usually this metaphor presents the teacher as gardener who actively influences the process of natural growth of the plants in the garden (pupils in school).

In our paper we present the contemporary geographical education as garden in which the "geographical literacy" is growing as product of mutual efforts of gardener and plants (teacher and pupils). The plants we grow are alive and vital, they possess their own dynamics and this makes it hard to determine and accelerate the process of their growth by the mere will of the gardener and in the way he alone envisions their development. The "geographical garden" and its plants are separated from the environment (other educational subjects) by a fence. As our garden continuously interacts with that environment, the fence is playing a crucial role – first to protect the plants from the pests (reduced geography lessons in secondary school curriculum, obsolete school facilities) and second - to provide transparency for innovative approaches and good practices (new information technologies, improvement of organizational culture and behavior).

The gardener's goal is to preserve the vitality of the plants (the motivation of the pupils) and to achieve high yields (geographical literacy) by using a number of contemporary tools and instruments (new educational methods and techniques).

This paper and the metaphor used aims at providing an improved model of geographical literacy setup and development based on the traditional Bulgarian model.

KEYWORDS: geographical literacy, geographical education

Ich betrachte mein Atelier wie einen Gemüsegarten: hier sind die Artischocken, dort die Kartoffeln. Ich arbeite wie ein Gärtner, oder wie ein Winzer. Die Dinge entwickeln sich langsam. Sie wachsen und reifen. Man muss pflanzen. Man muss wässern, wie man das beim Salat tut.

Joan Miró

(Source: Müller, U. Kann man Bildung managen? In: Wert und Werte im Bildungsmanagement. Nachhaltigkeit - Ethik - Bildungscontrolling, W. Bertelsmann Verlag GmbH&Co.KG, Bielefeld, Germany, 2010)

INTRODUCTION

All processes and events have their geographical dimensions. Thus geography is one of the fundamental curriculum subjects in Bulgarian school. It helps pupils understand the spatial interrelations on Earth surface and the way mankind modifies geographical space. By developing geographical knowledge and skills the pupils expand their ability to think, to react adequately in different situations in school and everyday life, they acquire values which play significant role in forming their attitude to the world. As part of general secondary education, the geographical education forms two kinds of values – "the absolute value" (inherent only to geography as an educational subject which develops specific thinking abilities [1]) and "the relative value" (determined by the relation of geography to other curriculum subjects).

Like every public activity geographical education develops in accordance with the changing needs of human society. Currently it is confronted with a number of challenges different in nature and scale:

- New revolutionary ways of acquiring knowledge, new forms of cognition and a new attitude to cognition;
- Process of globalization and dynamics of information society;
- Rapid development and growing influence of information and communication technologies in all areas of public life;
- Need for coordination and synchronization of the educational systems in the EU countries in order to establish "common European educational policy"[2];
- The current social, economic and political conditions in our country which have changed the requirements and expectations to education in Bulgaria.

The formation of new educational culture is adequate response to the current needs of our society; that would imply new educational environment for geographical training with new requirements towards the education of young people aiming at their successful adaptation and accomplishment of goals through lifelong learning. That is why it is very important to define and establish a new educational paradigm (model, framework, image) with its core based on the idea of a free individual and his needs, interests and responsibilities for one's own success and the public welfare. This new educational paradigm should provide pupils with new possibilities for making choices, for taking action and should ensure opportunities for individual as well as team work and presentation, thus preparing pupils to be both citizens of their state and citizens of the world.

Our modest contribution to the elaboration of this new paradigm is to present the current geographical education in Bulgaria as "the garden of geographic literacy".

The association of pedagogical activity with gardening is not a new one. By the use of this metaphor the teacher usually is presented as gardener who actively influences the process of natural growth of the plants in the garden (pupils in school). Being a gardener, the teacher plans his work, envisages the consequences of it, adapts to the conditions of the changing environment and has the courage to take decisions. Teacher-gardener can plant the seeds (pupils) in the "right" time and in the "proper" soil for them, can take care for their suitable placement in the garden so they could receive enough amounts of sunshine and water and he can also sow them. But the rest must be done by the plants themselves, depending on the imperative and changing conditions of the surrounding environment (fig.1).

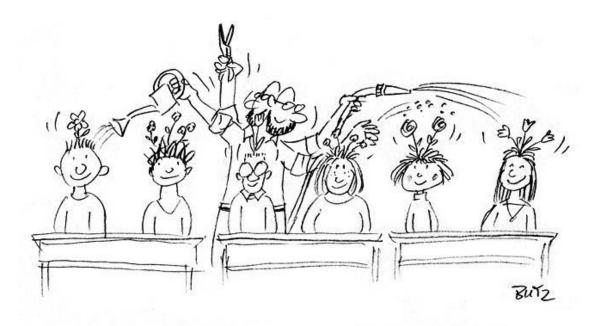


Figure 1. The miraculous tool against heterogeneity (Source: A. Rendel. Fördern und Fordern – mit Differenzierung im "Nebenfach" zum Lernerfolg? KlettMagazin/Terrasse, Ernst Klett Verlag GmbH, Stuttgard, Germany, 1.Hj.2013, pp.3, 2013)

And since our garden has specific features, our gardener's care should also be done in a specific way. So what are these characteristics?

The garden of "geographic literacy" represents the "modern" geographical education which:

- is based on geographic cognition and knowledge and on the general theory of learning;
- is carried out transparently, deliberately and with great responsibility;
- it develops a set of competences (subject, methodological, social, personal) via fostering complex thinking;
- applies a wide variety of methods, forms and means of education;
- is based on an individual approach;
- searches for the balance between learning and control in education. [3]

In turn, current pedagogical approaches present learning as a strongly individual, versatile, self-organized and self-determined process which can be implemented in different ways. Learning occurs predominantly as a self-developed process. It could be encouraged, supported, accompanied but not produced. Based on this concept the pupils will take the leading role and in many cases they will replace the currently dominating teacher. The teacher will participate more or less as an adviser, coach or moderator in the process of education. [4]

The main outcome of the statements above is that our plants (pupils) are alive, vital, they possess their own dynamics and this makes it hard to determine and accelerate the process of their growth. The gardener should ensure an internal differentiation, individual approach and usage of appropriate stimulus for the pupils. [5] Although systematical or situational growth stimulators could be allowed, they should always be in sync with the plants' inclinations, their individual growth and the possibilities to harvest the expected yields. [5] In turn, the plants develop on their own will and responsibility.[6] The

conditions for such development are established through systematic and planned usage of variety of contemporary interactive methods, forms (group, partner, individual work), means (diverse sources of geographic information) e.g. through "Teamtraining", "Methodtraining" and "Communicationtraining". [6]

In our paper we present the contemporary geographical education as garden in which the "geographical literacy" is growing as a result of the mutual efforts of gardener and plants (teacher and pupils). The "geographic literacy" goes through several stages of development – first geographic literacy, then geographic competence and finally a model of behavior in geographic space. [7] These stages are consecutive, each building up on the basis of previous one. Favorable conditions, specific cares, continuous observation of the outer environment and appropriate stimulus for development are needed at every stage of the process.

A distinct sign and specific feature of the geographic garden is the abundance and variety of plant fruits and kinds. For example, such are the "fruit" of subject and thematic culture, the "fruit" of methodical culture, the "fruit" of social competence [6] or the "fruit" of digital literacy (according to European reference framework [8]).

The "geographical garden" and its plants are separated from the environment (other educational subjects) by a fence. As our garden continuously interacts with that environment, the fence is playing a crucial role – first to protect the plants from the pests (applying normative and restrictive education divided in subjects) and second - to provide transparency for innovative approaches and good practices (improving the multidisciplinary education).

The gardener's goal is to preserve the vitality of the plants (the motivation of the pupils), to let "geographic literacy" to mature and to achieve high yields by using a number of contemporary tools and instruments (new methods and techniques in teaching and control of education). Good examples are the usage of interactive teaching methods and also the "new" forms of assessment in geographic education. [3]

So let us metaphorically introduce the tasks carried out by the gardener [9]:

- He ensures sufficient amount of sunshine as he operationalizes the goals in educational process according to the mission of geographic education and normative regulations;
- He prepares the soils and finds suitable location for planting as he creates a work environment favorable for education;
- He waters the garden via organizing and conducting education and stimulating the development of literacy, competences, behavioral model and values;
- He takes care for the right reproduction of plants via stimulating the development of internal motivation;
- He ploughs the soil using the appropriate methods, forms, means in educational process and thus fosters the development of desire to learn by one's own will and responsibility.

And how can we enrich our geographical garden?

We will present a new "fruit" - 'the fruit" of multimedia literacy which is a kind of digital literacy. Growing this fruit in our geographical garden will be in response to expectations and needs of the new information society towards geographic education and it will develop new approaches of knowledge and new forms of cognition, and new attitude to cognition in the information century. Similarly, like the ripening of geographic literacy the multimedia literacy also matures passing through several stages — multimedia literacy, multimedia competence and behavioral models in the information society. These stages

are consecutive and are functioning in hierarchical subordination. The evolution of behavioral models implies the presence of geographic literacy and competence and together they will determine the formation of values in the information society on the basis of multimedia technology.

What conclusions can be drawn from the comparison between geographic education and gardening?

- The geographic education is implemented in a new environment and faces a number of challenges;
- The roles in the process of education are changing and so is the interaction between teacher and pupils;
- The methods and tools of educational process are in process of modernization;
- Geographical education aims at higher and more comprehensive goals;
- It provides the opportunity to achieve the contemporary educational requirements for humanization, socialization and better technology provision.

Finally, all listed arguments clearly prove the substantiality of geographical education and its potential to comply with the contemporary social and economic requirements to education.

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