

## “RENDEL MODEL” – A DIFFERENT APPROACH FOR CONTROL AND ASSESSMENT IN GEOGRAPHY TRAINING

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**Abstract:**The “modern” geography training is determined by a variety of specific features. Firstly, they are related to the goals of geography education and secondly – to geography methodic. Contemporary geography training is aiming not only at development of cognitive competence of pupils but also to cultivate their methodical, social and emotional competence and respectively the accomplishment of specific behavioral model. For the training process it means problem-centered orientation and usage of activity-centered (“learning by doing”) principles and individual approach. It is considered that the learning process is successful when it is based on transparency and clarity, motivation, cognitive activity, positive thinking and personal attitude.

Evidently, the following questions arise:

- How to implement the training control in such conditions?
- How to measure and assess the real achievements of pupils/students?

In presented paper the answers of stated questions are explored using the “Rendel model”. It offers a fruitful theoretical framework for control and assessment in geography education and investigates such important aspects like: the personal management of learning process; role and place of basic geography literacy; activity orientation of new methods in geography training which stimulate the development of social, methodical, emotional and personal competence of students; development of "feedback culture" between the teacher and the pupils/students; different ways of controlling and evaluating the students' achievements; the role of control and evaluation in development of student's logical thinking and "long lasting" learning etc.

Regarding the control and evaluation under a new methodology of geography training, we think the Rendel model would have a great potential for real application. In conclusion, we point out that the change in geography teaching methodology inevitably causes changes in the "culture of learning", respectively in control and evaluation. Although concepts such as "modern" methodology, "new learning methods", "modern geography training" have been affected, it would be wrong to think that the "old" proven methodology should be dismissed easily. These are the reasons to seek opportunities for adapting the Rendel model in geography education in our country.

**Keywords:** geography training, control, assessment.

Recent important issue in geography didactics in Bulgaria is the effectiveness of educational process in secondary school. This is related to the ever increasing public requirements for the quality of geographic cognition and knowledge, and for development of students' personal competences for successful social and professional adaptation and realization. The pointed needs influence undoubtedly the educational process in turn. The educational process should implement and create conditions for the transformation of geographic information into knowledge, skills, competences and behavioral models relevant to the life and activity of the pupils. And it means that the educational process is considered as “means of achieving public and personal effectiveness” [4].

In regard to the above-mentioned the main purpose of this paper is:

- to outline the main characteristics and peculiarities of current geography educational process with a view to highlight the possibilities for increasing its efficiency;
- to take into account the particularities of control and assessment in geography training under these conditions according to the "Rendel Model".

Generally speaking, the contemporary educational process has several key features [2],[3]:

- real interaction between the two subjects (teacher and pupils) in a particular environment;
- interaction based on specific learning content;
- interaction aimed at achieving certain goals.

And what does it mean for geography education?

- Use of specific resources that determine the interaction between the subjects (normative, information-methodical, human, etc.);

- Interaction management with an emphasis on students' activity and "learning by doing";
- Problems related to developing students' cognitive and creative abilities by solving problems and problematic tasks;
- Use of specific methodology in geography training (principles, methods, approaches, etc.);
- Enhancement of integrative tendencies by applying the integrated approach at the inter-subject and intra-subject level [4].

In addition to the above-mentioned, "modern" geography education also relies on some specific notions such as:

- Pupils with their needs and interests are in the center of the educational process (humanizing the educational process);
- Strengthening the new roles of teacher and pupils based on partnership and cooperation between them (sociologizing the educational process);
- Management of the educational process based on interactivity.
- Implementation of learning activities as educational technologies usage of which leads to the achievement of the goal (technologization of the educational process) [1].

Therefore, the understanding of the educational process based above all on the change in the nature of communication between the subjects is a step forward in improving the quality of geography education. Confirming this fact with empirical research [1] is a reason for us to look for a new quality and efficiency in "modern" geography training. Which are the main features that characterize the "modern" geography training?

- It supports the student's active position;
- Also develops student's ability for reflection and self-reflection;
- It cultivates their knowledge relying on basic notions, facts, theories and experience;
- And establishes relations and enhances interaction between educational process and the surrounding environment.

In order to implement this type of "modern" training, a new "modern" methodology is also needed. Naturally, this methodology will not only lead to changes in organization of the geographic learning process but it will also outline the new orientation in its control and assessment. The control of geography training should be developed in two dimensions - quantitative and qualitative. And in this respect the question arises: How could the achievements of pupils be measured and evaluated in the context of a "new" methodology of geography training? To answer this question, we will explore the "Rendel model" (Figure 1).

Rendel model is of interest to us because it considers learning in geography training not just as a result but as well as a process. Without this understanding in mind, when working with "modern" methods (e.g. project, mystery, game) control and assessment would have a one-sided character. What do we mean? The orientation towards the learning and training outcomes directs the control to the measurement and evaluation of the subject-thematical and methodical competence of the pupils, i.e. their geographical literacy. Traditional forms and ways of control in such case are fully applicable. It is a fact, however, that the development of methodical, social, emotional competence as well as the development of relevant personal qualities in the students is being sought today. In this sense, the control of training process should not be restricted just towards that orientation. In essence, the achievements of pupils in geography education have a procedural side. Although they are evaluated as a result at the end of the lesson, the assessment is still a consequence of the learning process (gathering information, processing and presenting it, etc.). In other words: the orientation of control to the procedural side of learning is inalienable and unconditional.

In geography education, there is still a shortage of theoretical models and scrutinized forms for control and assessment in environment where new training methods are applied. The "Rendel model" offers a new viewpoint in such circumstances. It offers a theoretical framework for control and assessment in geography training on the example of the school project and the mystery. Which are the main assumptions which are of interest for us?

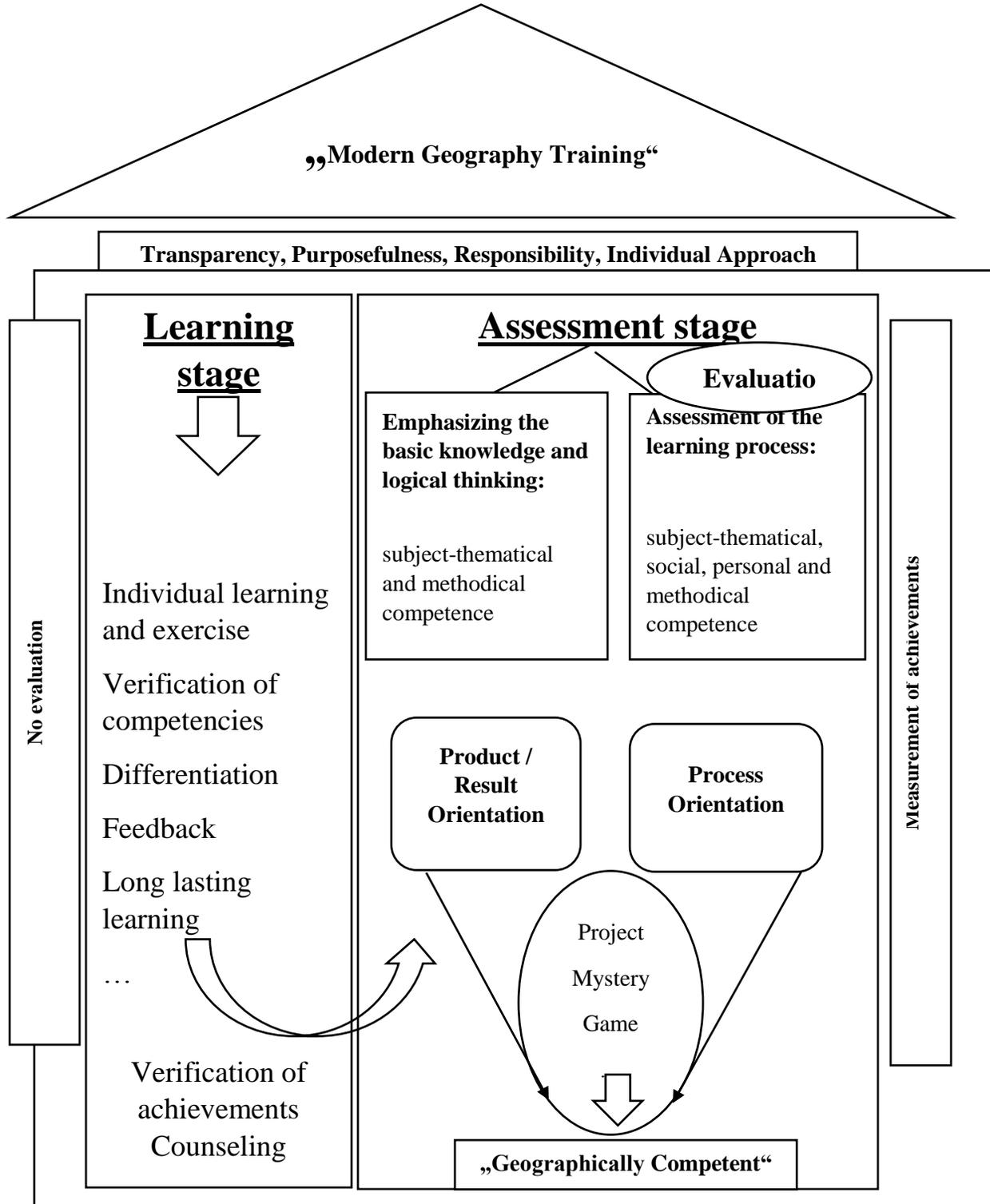
- the control and evaluation of the pupils' achievement covers both outcomes and processes;
- "modern" geography training evolves through pupils' "learning by doing" activity which means controlling and evaluating the "learning by doing" process;
- enhanced activity orientation of new methods in geography training which stimulate the development of social, methodical, emotional and personal competence of students;
- the pupil's personality development control is mostly done in the learning process;

- personal management of the learning process where pupils perform "adequate feedback response to situations" [5];
- control and evaluation are carried out under conditions of "transparency, purposefulness and responsible consciousness" (ibid.);
- a "feedback culture" is developed between the teacher and the pupils (ibid.);
- the basic geographic literacy is always in the center of geography education process, i.e. the basic geographic knowledge and skills as well as systematic logical and causal thinking, and usage of acquired knowledge in different context;
- main role which control and assessment play is the constant negotiation, deepening and consolidation of the basic geographic literacy of the students which stimulates the development of their logical thinking and "long lasting" learning (ibid.);
- it is meaningful to make distinction between the learning and control stages in one perspective – and it is related to the assessment.

In our opinion, these are particularly valuable ideas for contemporary geography education in our country in view of the sought quality and effectiveness. Let us take the last example - the distinction between the stages of learning and control. Contemporary scientific research shows that in a relaxed and positive environment the learning process is most effective and long-lasting. Through individual approach, counseling and purposeful individual stimulation the pupils show higher results in the learning stage i.e. without the "pressure" of the assessment. Another argument is that every mastering of skills, abilities, inclinations is based on regular, consistent and continuous exercises. This could be achieved better in the learning phase without evaluation.

In conclusion, we will point out that the change in geography teaching methodology inevitably causes changes in the "culture of learning", respectively in the control and assessment of training process. Although concepts such as "modern" methodology, "new learning methods", "modern geography training" have been analyzed, it would be wrong to think that the "old" proven methodology should be dismissed lightly. We do not think the "new methodology" is better just because it is a new one. Not the novelty is what should attract the attention but the opportunities which "new methodology" offers: to develop logical thinking; to strengthen acquired skills and "learning by doing" abilities, to support young people's desire to be responsible and to improve themselves and become better. These opportunities should attract the attention of geography didactics in order to increase the quality and efficiency of geography education.

Regarding the control and assessment under a new methodology of geography training, we think the Rendel model would have a great potential for real application. This is the main reason to seek opportunities for adapting it to geography education in Bulgaria.



*Fig. 1: The "Rendel Model" for Control and Evaluation in "Modern Geography Training" (Rendel, A. 2009: 22)*

#### REFERENCES

- [1] Р. Гайтанджиева, Стратегия на географското образование в СОУ при новите реалности, София, ИК „Анубис”, 2000
- [2] П. Петров, Актуални проблеми на педагогическото общуване, София, Педагогика, 1, 2001
- [3] Пл. Радев, Обща училищна дидактика, Пловдив, УИ „П. Хилендарски”, 2005
- [4] Л. Цанкова, Образователният процес по география в средното училище от позициите на конструктивизма, В: Годишник на СУ, ГГФ, Кн.2, Том 105, 2012, 445-451
- [5] A. Rendel, „Neue“ Formen der Leistungsbeurteilung im Geographie-Unterricht, In: Symposium Geographie/ Geschichte und Schule 25.04.2009, Essen, 2009 - [https://www2.klett.de/sixcms/media.php/229/Vortrag\\_Symposium\\_Essen1.655037.pdf](https://www2.klett.de/sixcms/media.php/229/Vortrag_Symposium_Essen1.655037.pdf)