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Integrate geographic skills with active learning in geography: a case of Turkey

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Abstract

This paper has two dimensions: Active learning and geographic skills in school geography. It is essential to integrate active learning with geographic skills in a framework of a geography curriculum in order to reach a better geography education in schools. After the renovation of the geography curriculum of high schools in Turkey in 2005, there has been a new viewpoint of learning and teaching geography in schools. One of the most important points of this approach is based on educating students according to eight special geographic skills in the context of active learning. The geography curriculum brought these skills together to cater for students at all levels of high schools. These skills include understanding students, the subject matter of geography, the strategies that may be adopted in the classroom, and ultimately, the ways in which these are combined to create effective geography criteria. Skills in geographical education may also be taken to refer to those skills that students may be expected to develop as a result of their experiences in their geography classrooms.

The skills based Turkish geography curriculum includes these geographic skills: Map skill; Observation skill; Fieldwork skill; Geographic inquiry skill; The Skill of Preparing and Explaining Tables, Graphics and Diagrams; Chronology Skill, Skill of Using Evidence; Skill of Perception about Change and Continuity. In this study, I try to investigate the change in the way of learning geography in Turkish high schools according to skills based education. The result of this study shows that the Turkish geography curriculum has a good skills-based structure but the geographic skills are not sufficiently connected to active learning methodologies within the content of the curriculum.

Keywords: Geographic Skills, Active Learning, Constructivism, Geography Curriculum, Turkey

1. Active learning in geography

Most of the educators agree that the active learning process is better for students' understanding and development in many areas. And many teachers and educators would like to be such educators for students.

The active learning process starts to stop thinking the teaching way and starts to think how the students learn. So it is necessary not to think about teaching for teachers but to focus on learning by students. This also means that if something is learned by students it is because they are active. All learning is active in a certain sense, but some kinds of learning are more active than others.

The term "active learning" covers a wide variety of learning strategies aimed at encouraging active student participation in learning (learning-by-doing). Ideally it should also encourage active reflection on learning activities (INLT). Active learning is about learning by doing. It involves a student-focused approach (Prosser and Trigwell, 1999). There is considerable evidence that well-designed active learning is an effective way of student learning (Biggs, 2003; Ramsden, 2003).

It has been suggested that learning requires more than simple activity. Rather, it requires students to both do something and to think about what they are doing or have done (Bonwell and Eison, 1991). Moreover, Gibbs (1988, p. 9) suggests: "It is not enough just to do, and neither is it enough just to think. Nor is it enough to simply do and think. Learning from experience must involve linking the doing and the thinking". Some authors described experience using active learning strategies in a major assignment, which was often a courselong assignment, such as Carbone and Power's (2005) weather journals, Hooey and Bailey's (2005) journal of world events, Pandit and Alderman's (2004) international interview, and Chacko's (2005) exploring youth cultures research project. If we accept that reflection is a necessary component of successful active learning strategies, we can look to theories of experiential learning to guide us in how we might incorporate reflection into our classroom activities (after INLT, 2006). Despite these difficulties in applying active learning in classrooms, most of the geography educators argue that active learning strategies are effective in geography lessons (Buckley et al., 2004; Klein, 2003). Healey, Pawson and Solem (2010) stated that geography provides a useful context for exploring approaches to active learning and student engagement for several reasons. According to them geographers are by nature sensitive to diversity and its many cultural and demographic manifestations, not the least of which concerns the increasingly diverse character of college and university students.

With regard to this point attention should be paid to skills education in geography. Plum argues that geography must be a more project based lesson than listening to a lecture (2007, p. 246). According to this author, students should not start on a discipline study like economics or geography or chemistry. They should learn to see the world in a more complex understanding than the disciplines cutting pieces of the reality from the world. It was not the disciplines which look at the important problems in the society (Plum, 2007, p. 244). Everybody thinks that geography is a subject which is the middle of daily life, but in the classroom it does not have a character like that but is a memorization subject. Kirchberg (2000, p. 5) made a good description geography lessons: The didactics of geography is living in a world of illusion. The perfect lesson plans presented in journals and the necessary articles on theory correspond less and less to what is happening in the classroom. Have we closed our eyes to reality? Pupils have changed their behavior patterns, their interests and their attitudes towards learning. Therefore teaching geography has become more difficult.

The situation of geography education was like the crisis which Kirchberg described after the 1940s in Turkey. Geography in Turkey could not avoid being a boring subject in schools, of which the graduated students could not be teachers until today (Artvinli, Bulut and Kaya, 2007, p. 29). In this context, it should be seen as important to discuss new and previous curriculum in the context of skills education. It is important to emphasize "geographic skills" as one of the most important main aims of and key to active learning in renovated geography curriculum of 2005.

In Turkey, after the renovation of all curriculums in primary and high schools, there are visible changes related to the notions of education, learning, and teaching. Generally it can be said that there is a radical transformation about the student-centered approach in education from the viewpoints of "what to teach, how to teach, how much to teach, what to use while teaching" to a viewpoint of "what the student wants to learn, what s/he will do to learn, what can help his/her learning, how much s/he learns etc..." (Bery and Sharp, 1999; Lea, Stehanson and Trav. 2003: Hartly. 1987).

transformation of minds into this point of view do not immediately affect the behavior of people or educators. Active learning is seen as the key element of a student-centered approach in order to construct the classroom process in that way. The renovated geography curriculum of Turkey brings a new driver to apply effective active learning in geography classrooms by setting out the geographic skills of the curriculum.

2. Geographic skills

Geographic skills are a very important personal benefit from geography for the future generations. To prepare today's students for tomorrow's workforce, the challenge for geography educators is one of connecting disciplinary instruction with more general training that yields marketable and valued skills in the modern workplace (Hill, 1995; Richardson and Solis, 2004; after Solem, Cheung and Schlemper, 2008, p. 357).

The International Charter on Geographical Education in 1992 states that learning Geography involves skills in data forms, field methods, map work, interviewing people, interpreting secondary resources, applying statistics and decision making (pp. 7-8); according to Gerber (2006, p. 21). The development of the skills used by geographers is essential to conduct any detailed form of geographical investigation.

On the other hand, Karen A. Thomas-Brown (2011, p. 182) argues that geographical learning involves learning about the nature environments, climates, natural resources, and human, cultural, political, and spatial contexts of places. These, in essence, underscore the geographical skills that students in today's global society need if they are to function as effective global citizens. Developing analytical skills in geography must occur, according to Reinhartz and Reinhartz (1990), through the answers that one gives to the following questions: "What?", "Where?", "Why there?", "What is the meaning of this location?". According to these researchers, these are the questions that foster critical analysis among students in geography. In the same vein, the associations that contributed to the development

of the National Geography Standards Project 19942 specify that the skills they aim to develop can be summarized in five categories: 1) to ask geographic questions; 2) to look for geographic information: 3) to organize geographic 4) information: to analyze geographic information; and 5) to answer geographic questions. Thus, to ask pertinent questions such as "where?", "how?", and "why?" shows a sense of observation and the development of a critical spirit (Benimmas, 2006, p. 76). According to Ostapuk (1997, p. 198) as geography teachers, we have an opportunity to pass to our students the legacy of geographic literacy. We must go beyond the content of geography in our efforts to help our students become geographically informed. The five geographic skills sets allow us to actively involve our students in doing geography.

In this study the qualitative research questions are:

- What kind of geographic skills does the Turkish geography curriculum include?
- What kind of content does the Turkish geography curriculum have in order to integrate geographic skills into active learning?

3. Research aim

The purpose of this study is to examine the teaching and learning of geography in high schools of Turkey from the skills education perspective. In addition it aims to discuss the connection between the aims of geographical curricula and geographic skills which take part in the curriculum. In this way, this study aims to bring to geography teachers and educators' attention how they can achieve the aims of the geography curriculum by setting the geographical skills at the center of their classroom process organizing.

4. Research method

This study is descriptive literature research in which a qualitative method approach was used. Qualitative research approaches collect data through observations, interviews, and document analysis and summarize the findings primarily through narrative or verbal means (Creswell, 2012; Lodico et al., 2006). In this research document analyses were used in order to investigate the geography curriculum according to geographic skills and active learning.

5. Data collection and analysis

There are many ways to collect qualitative data for a qualitative approach. We used document analysis for this research. Documents consist of public and private records that qualitative researchers obtain about a site or participants in a study, and they can include newspapers, minutes of meetings, personal journals, and letters. These sources provide valuable information in helping researchers understand central phenomena in qualitative studies. They represent public and private documents (Creswell, 2012, p. 223). The analysis can range from an extraction of general themes to a narrow, specific and detailed analysis. It may use either quantitative analysis (e.g. counting the number of times that a theme occurs) and/or qualitative analysis identifying the major themes). In either case it is important to document the criteria which are used to make decisions about rating and analyzing material (Duignan, 2008).

Firstly active learning and geographic skills in geography was investigated in literature with its positive effects in the process. Document analysis was used in order to compare the geographic skills and aims of the Turkish geography curriculum. After that it was discussed how to achieve the aims of the Turkish geography curriculum by using and applying geographical skills in the curriculum according to the findings. Finally it was suggested that geographic skills are the main aims and key of active learning in the 2005geography curriculum in Turkey.

6. Findings. Geographic skills and aims of geography curriculum

The geography curriculum has been changed a few times between 1941 and 2005 in Turkey. Most of these changes have been evolutionary, not revolutionary (Taş, 2005, p. 35). As a result, due to the absence of a standard curriculum as well as the predominance of memorization, teachers and students have faced numerous problems at schools.

On the other hand, the 2005 curriculum of Turkey stresses that: "Teachers must make use of the events in and out of the school to show the importance of geography in life. Students must be able to solve problems by learning real life problems and contradictory situations" (MoNE, 2005, p. 7). In this renovated curriculum, there has been an endeavor to help geography education to compare current ideas prevalent in the 1992 International Charter on Geographical Education (IGU-CGE, 1992). So it can be argued that it is one of the best reforms of geography education in Turkey.

The 2005 curriculum's general approach to geography education and some renovations in it:

- Student-centred, enquiry-based and more flexible (MoNE, 2005);
- It brought a new approach, method and content for geography education in Turkey;
- It provides a holistic approach through which it aims to develop a geographic knowledge base, skills, values and attitudes in students with particular attention to pedagogical concerns;
- New and the most comprehensive geography curriculums in the history of Turkey;
- Constructivist approach to learning and teaching in schools;
- New (active) learning styles and aims;
- New evaluation process and techniques;
- New teacher training programs;
- New textbooks from the new viewpoints.

The Turkish geography curriculum emphasizes geographical enquiry and progress rather than delivering some concrete body of geographical knowledge. Then it gives a great deal of importance to the fact that various

learning methods should involve students actively through an activity-based and constructivist education. These are possible only by developing skills that will enable students to observe patterns, associations, and spatial order. In fact, many of the skills that students are expected to learn involve the use of tools and technologies that are part of the process of geographic inquiry. There are eight special geographic skills in the Turkish geography curriculum of high schools:

- 1. Map Skill;
- 2. Observation Skill;
- 3. Fieldwork Skill;
- 4. Geographic inquiry skill;
- 5. The Skill of Prepare and Explain Tables, Graphics and Diagrams;
- 6. Chronology Skills;
- 7. Skill of Using Evidence;
- 8. Skill of Perception of Change and Continuity (MoNE, 2005, p. 19).

It is possible to say that these skills also prepare the students internationally to the five sets of geographic skills as follows (Geography for Life: The American Geography Standards, 1994):

- Asking geographic questions;
- Acquiring geographic information;
- Organizing geographic information;
- Analyzing geographic information;
- Answering geographic questions.

In the Turkish curriculum, it is emphasized that the thirteen general aims of the geography curriculum should be achieved by pupils before they graduate from high schools. These general aims are presented below:

- Understanding the theoretical and conceptual frame of geography and use research and presentation techniques, used in the formation of geography information;
- 2. Have the ability to cross-examine human-nature relations;

- 3. Understand the relations between the basic elements of the world and life;
- 4. Understand the working and changing of the nature and human systems;
- 5. Have consciousness to take care values of one's country and the world;
- 6. Know their responsibility about the working of the ecosystem;
- 7. Know their responsibility about saving human and natural resources;
- 8. Examine/scrutinize the interactions at local and global processes;
- 9. Know that progress must be in harmony with nature;
- 10. Know natural disasters, environmental problems, and develop precautions against them;
- 11. Know the importance of environmental, cultural, political and economic organizations in view of geography and international relations:
- 12. Have consciousness of the importance of Turkey in view of its local and global relations, geographical position, and that Turkey is a geographical synthesis country;
- 13. Know the importance of geographical values in obtaining "motherland consciousness".

When the geography curriculum is examined, it can be seen clearly that it is impossible to achieve these general aims without applying geographic skills in the classrooms. It is possible to give students the standards with a teacher centered approach. But that way cannot give students any vision of the challenges and drivers in the future world. Geographic skills should be at the centre of every planned lesson if the teachers want to succeed in achieving the aims of the curriculum. In other words, it is the key element to try to achieve geographic skills in lessons in order to achieve the general aims of the geography curriculum.

7. Conclusions

Although one of the best and the first student-centered curriculum we have, the new innovative curriculum reform has not been understood very well by teachers and educators in Turkey. Seven years have passed since the curriculum was first applied by teachers but most of them try to apply it in their own ways. There is not enough awareness on focusing not on the standards within the curriculum but on geographic skills and the general aims of the curriculum.

The previous curriculum was teachercentered and based on mostly the explaining method. It must be told that the training of geography teachers is not parallel with the new curriculum's skills. Most of them have used only the explaining method for many years. What will happen in the future then if the teachers cannot really put the new curriculum and its geographic skills into practice? What are the best and new student-centered methods to achieve geographic skills? How can we start to apply them? These are all problems posed by the new curriculum. These problems can be unanswered maybe because of the gap between the approach and methodology of the geography curriculum. The curriculum does not include enough information and the ways as to how to apply those contents in the classrooms during the teaching-learning process. But on the other hand it is possible to find more than 35 pages of explanation about assessment only.

For that reason, the problem of geography teacher training is maybe the most important problem in this curriculum revolution if the teachers do not apply the new curriculum and if they are not educated again in student-centered and active learning. Although the developed curriculum has a variety of educational objectives in geography, a wide range of geographic skills, and the encouragement of the students to research and solve problems they cannot find geography textbooks to develop themselves in the same way.

When it is considered that the aim of the new curriculum is to reach "geographic skills", it must be argued that the ways of teaching geography in classrooms should be renewed according to a geographic skills education by new teacher education programs in Turkey.

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