A COLLECTION FOR ENRICHING THE SOCIAL STUDIES CLASSROOM: INSTRUCTIONAL TECHNIQUES IN GEOGRAPHY EDUCATION

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Abstract

Having explained clearly in researches, unfortunately, social studies education, as one of the major part of primary education, is not going further than a boring lesson for students. In fact, students expressed that they like social studies education; however, because of classical teaching techniques used in classroom they do not concentrate on adequately for lessons. According to many educators when students actively involve lessons learn better – learn faster and gain greater satisfaction. The purpose of this study is to offer some alternate instructional techniques and some activities can be used in application of these techniques for geography education, which is an important part of social studies education, in order to find practical solutions for problems aforementioned above. In this study, respectively, use of map and globe, form of using computer and other technologies, and integration of different methods as music, role playing and folklore in geography education is given with extended literature review.

Key Words: Social studies, geography, alternative instructional techniques, technology.

Özet

İlköğretimin temel derslerinden birisi olan sosyal bilgiler yapılan çalışmalarda da açıkça ortaya konulduğu gibi maalesef öğrenciler için sıkıcı bir ders olmaktan öteye gidememektedir. Yapılan araştırmalarda öğrenciler aslında sosyal bilgiler dersini sevdiklerini ama bu derste kullanılan klasik öğretim teknikleri yüzünden derse yeterince konsantre olamadıklarını ifade etmektedirler. Birçok eğitimciye göre öğrenciler derse aktif olarak katıldıklarında çok daha iyi ve hızlı öğrenmekte, öğrendiklerinden de daha fazla haz duymaktadırlar. Bu çalışmanın amacı yukarıda belirtilen sorunlara pratik çözümler üretebilmek için sosyal bilgiler dersinin önemli bir parçası olan coğrafya öğretiminde kullanılabilecek alternatif öğretim tekniklerini açıklamak ve bu tekniklerin uygulanmasında kullanılabilecek bazı aktiviteler sunmaktır. Bu çalışmada sırasıyla coğrafya öğretiminde harita ve kürenin etkili kullanımı, bilgisayar ve diğer teknolojilerin coğrafya öğretimindeki kullanım şekilleri ayrıca müzik, canlandırma, folklor gibi değişik yöntemlerin coğrafya öğretimine entegre ediliş biçimi geniş bir literatür taramasıyla birlikte verilmiştir.

Anahtar Kelimeler: Sosyal bilgiler, coğrafya, alternatıf öğretim teknikleri, teknoloji.

1. INTRODUCTION

Geography is an integrative discipline that brings together the physical and human dimension of the world in the study of people, and their environments

(Project, 1994) and it is obvious that everybody needs to know about the nature of their world and their place in it (Project, 1994).

However, saying that learning geography is easy for people, particularly for students is a simplistic approach to geography. We consider many struggles of the students who possess a few spatial or global concepts. Especially, for academically challenged students, to learn the concept of global relations is difficult (Black, 2000). Furthermore, many students have some trouble in making connections between people, places and environments.

According to research that was done by Yildirim (1996) in 88 middle schools in 22 provinces representing the seven geographic regions in Turkey (total 262 teacher and 1203 students participated as questionnaires), in many schools teachers are still using lecturing, question-answer heavily as instructional techniques and both teachers and students are not happy in this situation.

Even though students express negative feelings about instructional techniques used in geography education, in contrast to common beliefs, students do not take social studies courses lightly. They place a certain degree of importance on them, and enjoy learning and doing assignments in these courses. They have a positive perspective in terms of the usefulness of these courses in their daily life and the degree of difficulty in learning the courses related material (Yildirim, 1996). However, using inappropriate instructional methods and regular activities can easily make this course uninteresting for students.

In order to overcome these problems, followings are main purposes of this study:

1- To follow recent social studies education literature for understanding new developments in geography education

2- To offer a valuable source to Turkish social studies teachers for meeting their need for instructional techniques.

Instructional techniques that will be given in this study not only will be helpful for many Turkish social studies teachers to teach geography lessons more effectively and but also create better and more enjoyable classroom milieu for students.

2. INSTRUCTIONAL TECHNIQUES FOR GEOGRAPHY EDUCATION

John Dewey laid out the problem for all modern educators in The Child and The Curriculum. His major question was "How can teachers link the vital, personal world of the child with the rational objective, ordered world of the scholar?" According to Dewey to resolve the child / curriculum tension it is important that educators use the student's experience as a springboard that catapults the child into the structure and thereby into the essence of the subject matter (Dewey, 1956). Virtually all educational psychologists agree with the proposition that students

learn better – learn faster, remember more, and gain greater satisfaction – when they are actively involved in learning (Barth & Shermis, 1984; Kromey & Bilokur, 1999). However, one of the important question is that "How can we keep student interest alive during a lecture?"

The point is that we will need to use a variety of instructional techniques and activities in the hope of getting and keeping the student's concentration. In a fifty-five minute period an average of three different techniques are needed to keep active attentiveness (Barth & Shermis, 1984). For example, some like and actively watch movies; however, some sleep (are passive) through movies (Barth & Shermis, 1984).

Depending on the aforementioned research, the following sections will provide detailed information about instructional techniques that may be helpful to solve problems in teaching geography:

2.1. The Use of Maps and Globes

According to many educators and recent research using maps and globes efficiently in geography is one of the important instructional methods to facilitate student learning (Hoge, 1996; Nelson, 1998; Parker & Jarolimek, 1997; Project, 1994).

We can use maps for many different purposes to teach different specialties of the world through geography. No single map, of course, can show everything, and the features depicted on each map are selected to fit a particular purpose. Maps can show not only visible surface features such as rivers, seacoasts, roads, and towns, but also underground features such as subway systems, tunnels, and geographic formations. (Project, 1994).

According to Bausmith & Leinhardt (1998), students gain more geographic knowledge from the task of constructing a map than from the combination of reading maps and completing well-designed worksheets. Therefore, making a classroom map or making one's own map, in the intermediate and middle grades, is one of the useful activities not only teaching spatial perspective, but also teaching map skills (Nelson, 1998; Parker & Jarolimek, 1997). While implementing a map activity in the classroom instead of individual study, group study can be more efficient because students who make maps in collaborative groups gain more geographic knowledge than do students who make maps individually (Leinhardt, Stainton, & Bausmith, 1998). Another efficient way to improve geography skills is to use a magnetic board map with moveable place names on it. Students move the magnets with the names to the right places on the map. This technique may be useful for all kids but especially for those with a poor spatial grasp of the world (Black, 2000).

Students report that they like games, therefore, to teach some geographic terms (e.g. latitude, longitude) and places through some map games can be more inspiring for students to understand some difficult geography subjects. For

example following game could be a good example of how a social studies teacher teaches one of the most difficult subjects in geography in a different manner.

Your mission:
Crack the code to find out where the thieves are taking the loot.
Briefing
Crafty robbers broke into the Royal Geographical Society in London and stole armfuls of priceless maps. Finding them would be hopeless, except that they dropped a scrap of paper *with some odd scribbles on it.
At the top is a rhyme that seems to be an instruction from the thieves' boss:

First letters from each place-name read.
Spell out the town and come with speed.

But the note doesn't mention any places! All you see are weird combinations of letters and numbers. Luckily, a sharp-eyed geographer peers over your shoulder and says, "Coordinates. How fascinating!".
The numbers, you realize, are the coordinates for cities all over the planet. (1) Find those places in an atlas or on a map. (2) As you find each place, write its name next to the coordinates. (3) Circle the first letter of each name. (4) Read the letters from top to bottom, and they should spell the name of a city. Now you know where to nab those cartographic crooks.
***Scrap of Paper**
The thieves who broke into the Royal Geographical Society left behind this code. (As a bonus clue, we've added the number of letters in each city's name.)

First letters from each place-name read.
Spell out the town and come with speed.

LATITUDE	LONGITUDE	LETTERS
40° 58' N	5° 39' W	9
21° 18' N	157° 51' W	8
36° 52' S	174° 46' E	8
1° 17' S	36° 49' E	7
6° 48' N	58° 10' W	10
21° 2' N	105° 51' E	5
16° 51' N	99° 55' W	8
41° 1' N	28° 58' E	8

KEY: ° represents degrees of latitude or longitude.
' represents minutes (out of 60) within a degree.

SOURCE: (NGS, 2001)

Although learning geography with map activities is very useful and many geographers advise using maps in geography instruction for middle schools, one should not overlook some of the limitations of using maps in geography education. One major limitation is that maps are not possible to accurately represent the round Earth on a flat surface without distorting at least one Earth property, such as distance, direction, or size and shape of land and water bodies (Parker & Jarolimek, 1997; GESP, 1994; Martorella, 1996; Martorella, 1994).

One of the ways of keeping away from these disadvantages of maps is to use globes when they are needed. Globes constitute the most accurate representation of Earth in terms of the properties of earth in terms of the properties of Earth's surface futures. However, although at least a globe is available in many classrooms; teachers generally do not prefer to use the globe in geography instruction. Many of them are afraid of breaking it. As described by Nelson (1998) globes are too often out of reach, to be used only with permission. Nelson points out that, the globe often sits gathering dust until some appropriate exercise is devised that requires its use. As a result, many students see geography as a serious job and stay away from geography. Also, they usually have difficulty making connection between geography and their lives.

2.2. The Use of Computer Technology

The educational use of computers in the classroom has rapidly increased since the mid-1980s for instructional and management purpose in every phase of education (Dynneson & Gross, 1999). Inevitably, the use of computer technology is one of the popular discussion subjects among geography educators (Shaver, 1999; Donaldson, 1999; Lemberg & Stoltman, 1999). For many decades, many researchers struggled with the question of whether computers and other elements of high technology make a positive and appreciable difference in learning. However, today the question is "Does high technology improve learning outcomes?" thus converted into "How can the capabilities of high technology be used to positively effect learning?" (Donaldson, 2001)

According to Keiper, geography that is integrated with technology "can enhance students" geography skills through authentic practice. In addition, using the computer is as a tool to develop active participation in complex authentic task results in a powerful learning environment (Stallworth & Braun, 2000).

2.2.1. Geographical Information System (GIS)

Co mputer technology is not only increasing students' access to information but also giving opportunities to free classroom atmosphere from monotonous (Black, 2000). Among the most exciting developments in geography education today is the geographic information system (GIS), a tool that enables students to examine layers of geography in ways that can reveal fascinating and unique patterns and processes (Donaldson, 2001). Many geography educators hold that enhancing geography education must include integrating spatial technologies such as GIS (Nellis, 1994).

GIS are software programs that enable students to make use of information about the Earth's surface from digitized data that record, store, and analyze a wealth of information. Geography is a visual and spatial subject, and GIS programs can easily display multiple aspects of an area. (Keiper, 1999; Stallworth & Braun, 2000). GIS programs allow students and teachers to apply constructivist-based pedagogy for working with maps and all the information that can be depicted on them (Stallworth & Braun, 2000). Teacher can also use these programs to create maps for whole class instruction as appropriate. Wikle and Lambert describe how GIS can be used to teach students data collection techniques in the field. After students find cultural and location data with Global Positioning Systems (GPS), they can code and integrate this data into a GIS to analyze and the process the information (Mustoe, 1999).

2.2.2 Spreadsheet and Word

Spreadsheet software, originally designed for finance applications, is very useful in many ways for the teacher and the student. Martin and Rea (1999) suggest five reasons for using a spreadsheet with students.

- Spreadsheets give a clear, ordered, and flexible way in which to record data.

- The data can be stored on a floppy disc, CD, DVD or hard drive for future use. Access is quick and editing can be carried out neatly with automatic changes made to calculations that have already been set up.

- Data can be exchanged by e-mail with pupils in other schools, for example, sending data about local environmental conditions, traffic or river flows.

- There is a range of functions that are quick to use such as drawing graphs and processing the data.

- The finished product, whether as a table or as graph, has a professional appearance that is the same for all pupils. This can be important in geography because of its emphasis on visually presented data (Martin, Rea, & Grimwade, 1999; Kent, Lambert, Naish, & Slater, 1996).

Hannah has shown different and interesting usages of spreadsheets in social studies in his study. In Hannah's work, student rated American places and ranked cities according to variables such as climate, cost of housing, health care, crime, education, employment, and other valuables. The students discussed the results of their data, and then, by using the mathematical capabilities of spreadsheet, they categorized the liveability of each places (Hannah 1985, as cited in Mustoe, 1999).

Word processing gives the user the capability to type text, save it, and then access it so that it can be changed in almost any way imaginable. Word processing can provide many opportunities for the teacher and the student in geography instruction. The teachers can write and save easily their documents. The students, in addition to printing documents, make changes to their ideas and to enhance the quality of their final documents (Martin et al., 1999; Mustoe, 1999). Furthermore, word processors can be used for word play activities. For instance, sentences can be written either as normal text or with hidden text boxes. The word can be either left to the students to write, or they can be written by the teacher. Words can be highlighted by the students, and then dragged to the correct place (Martin et al., 1999).

2.2.3 Using Digital Photos

The significance of photos in geography instruction is unquestioned. Photos are an invaluable resource in geography. For example, by using photos, we can bring many different landform characteristics, other cultures' living styles, and even daily life into the classroom. Development in computer and digital photo technology allows for ease in using photos in classrooms. Some advantages of using digital photos are having a valuable amount of examples (some photo base CDs contain about 2000 photos), being able to teach independent notions (students have a chance to create their own photos), being able to change photo and photo size, and being less costly (they are cheaper than hardcopy photos) (Barth, 1991; Martin et al., 1999).

2.2.4. Internet

Internet is a network that links computer networks all over the world by satellite and telephone, connecting users with service networks such as e-mail and the World Wide Web (WWW). On the one hand, from some educators' point of view, it is a valuable and endless source for education (Black, 2000; Nelson, 1998); on the other hand, it is useless and complex for others. Hyman Hirsh, a computer scientist at Rutgers University has referred to the Web as "an unorganized, uncoordinated collection of information that is totally overwhelming" (Hirsh, as cited in (Shaver, 1999).

The problem is that the store of data and information is so vast that meaningful use can be difficult. There is no real guide for Internet and more than 7 billion web pages can be seen as time consuming and frustrating (Shaver, 1999; Nelson, 1998).

In spite of some difficulties to reach correct resources, an abundance of geography resources, both teachers and students are available on the Internet. There is enormous potential to facilitate the teaching and learning of geography. The challenge is to take advantage of these opportunities (Martin et al., 1999).

2.3. The Use of Other Methods

Music: While technology enables us to enjoy recorded music at practically any moment we choose (e.g., driving, walking, skiing), it is often difficult for students to imagine life without instant musical enjoyment (Waller & Edgington, 2001). Therefore, teachers can use music based activities to enhance, for instance, in geography education. Some songs are explicitly written for the purpose of helping students' mastering of social studies. Such songs may help students to memorize the states and capitals, and understand some of the specialties of Nature. Even popular music, whether country or rock, sometimes has messages that can be beneficially used in geography education. However, while choosing popular music, the teacher must be more careful to avoid lyrics that are unsuitable for a school setting (Hoge, 1996).

Role Playing: Role-playing is unquestionably one of the most effective teaching techniques to evaluate students' interpersonal behaviors (Hoge, 1996). As mentioned by Parker & Jarolimek,

> Dramatic activities have great value in promoting social studies learning by helping sharpen the child's power of observation; giving purpose the research activities; giving insight into another's feeling; providing experiences in democratic living; helping create and maintain interest, thereby motivating learning; and affording an excellent opportunity for the teacher to observe the behavior of children (p.261).

Role-playing gives students a separated, reflective view of social issues. Through role-playing, students get a greater perception of what motivates human behavior, and how their own behavior influences and how it is perceived by others (Hoge, 1996).

Folklore: Literature is often rich in elements of geography. Some of the stories are excellent for exploring geographic themes and providing creative opportunities for geographic learning (Ludwig et al., 1991).A study of folklore can simply be related to geography units. A study of folklore includes a wide range of different cultures, therefore giving students' insight into how much we are like as we teach through the use of story (Tiedt, 2000). After reading stories, the teacher can ask students to get them to think about what life may be like in another culture or he may talk more explicitly about cultural differences. In addition, the teacher may use some traditional costumes within their reading. Different eating habits in other cultures, for instance, may motivate students' interest in other cultural practices (Black, 2000).

3. CONCLUSION

Many students are interested in geography and they study hard to be a geographically informed person and to catch up with realities of the world. On the other hand, while learning the qualities of any given geographical knowledge many of them encounter serious problems. For example, to understand the spatial context of people, places, and environments on Earth, or to create a mental map of their surroundings in their minds can be really difficult for 6th or 7th grade students.

According to many educators method cannot easily be separated from what students learn (Dewey, 1916; Fenton, 1967; Hertzberg, 1988; Levstik, 1990 as cited in Thornton, 1998). Therefore, instructional methods and alternative activities are important ways to make students' learning easier in geography education.

The literature review shows that many different kinds of instructional methods and activities can be found to enrich classroom atmosphere and to improve students' learning processes in geography instruction. For example, using maps and globes, computers, role-playing (drama), newspaper, television, folklore and music are only a few methods and activities that are mentioned in a literature review. However, instructional methods and activities cannot be confined to these sources. Teachers can create their own methods and activities and this may give birth to numerous possibilities in their classrooms because every student in the class is a unique learner and only the teachers can find suitable methods and activities for their students.

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