

The Role of Media in Geography Courses from the Perspectives of Pre-Service Social Studies Teachers

Sosyal Bilgiler Öğretmen Adaylarının Bakış Açısından Coğrafya Derslerinde Medyanın Rolü

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Özet: Bu araştırmada, sosyal bilgiler öğretmen adaylarının coğrafya derslerinde medya kullanımına ilişkin algıları belirlenmeye çalışılmıştır. Olgubilim deseninde tasarlanan araştırmada nitel araştırma teknikleri kullanılmıştır. Çalışma bir devlet üniversitesinde Eğitim Fakültesi Sosyal Bilgiler Eğitimi Anabilim Dalı'nda 2013-2014 eğitim-öğretim yılında öğrenim gören 134 öğretmen adayı ile gerçekleştirilmiştir. Araştırma verileri yarı yapılandırılmış görüşme tekniği kullanılarak toplanmıştır. Toplanan veriler nitel betimsel analiz yoluyla analiz edilmiştir. Analiz sonuçlarına göre, sosyal bilgiler öğretmen adayları coğrafya ile ilgili bilgileri en çok internet kullanarak edindikleri, fakat internette bulunan coğrafya programlarını etkili kullanmadıkları belirlenmiştir. Öğretmen adayları, derslerine giren coğrafya öğretim elemanlarının medya kullanımına yeterince yer vermediklerini düşünmektedirler. Öğretmen adaylarının öğretmenliğe atandıkları zaman öğretimsel medyayı derslerde etkili bir şekilde kullanmayı düşündükleri tespit edilmiştir.

Anahtar Kelimeler: Sosyal bilgiler öğretmen adayı, coğrafya dersi, medya kullanımı, öğretmen yetiştirme, nitel betimsel analiz

Abstract

In this article, the authors explore the social studies teacher candidates' understanding of the role of media in geography courses which they took. Qualitative research techniques were used in the study designed using phenomenological pattern. The study was conducted with 134 pre-service social studies teachers at a state university's Faculty of Education, Department of Social Studies Education in the 2013-2014 academic year. Data were collected via semi-structured interview technique. Data of the study were analyzed by using qualitative descriptive analysis. According to results from the analysis, social studies teacher candidates have been accessing the geographical knowledge mostly by means of internet, but they didn't use internet fruitful. Teacher candidates thought that their geography lecturers have not been using media in geography courses adequately. After appointment to teacher profession, they will have used instructional media technologies effectively.

Keywords: Social studies pre-service teachers, geography courses, use of media, teacher training, qualitative descriptive analysis

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Introduction

Scientists and policy makers, starting in 1970s and rising in 1980s and 1990s, have repeatedly expressed that the technology would bring great benefits to teaching and learning practices. Although these greatly promising words were missed, recent studies show that today's computer and network technologies increasingly influence the educational environments (Becker, 1999, 2000, 2001; Gibson and Oberg, 2004; Ronnkvist, Dexter and Anderson, 2000; Russell, Bebell, O'Dwyer and O'Connor, 2003; Gomez, Sherin, Griesdorn and Finn, 2008).

One of the important roles of the faculties of education is to make sure that the prospective teacher candidates can use the field-specific technologies effectively in their classrooms and they are qualified enough to transfer this technology effortlessly whenever they need to practice in their daily lives (Gomez et al., 2008).

Geography must be taught in a way that is congruent with the most recent developments in scientific research and technologies. Teachers are expected to bring new technologies to their classes. Geographic information technologies are considerably suited for active learning processes. Daily practices are increasingly oriented and students mostly use it intuitively without realizing that it is related with geography. However, an individual must be aware that use of technology does not mean a better teaching. Geography must be adapted to technological environments which have changing teaching methods (Lindler-Fally, 2009).

Yazıcı and Demirkaya (2010) stated that teaching technologies have an important role in the teaching and learning of geography and they claimed that use of technology increase the quality of geography teaching and it helps better detection of geographic information and process in the mind. They stressed that students can create more powerful cognitive structures, help them practice what they learned in their daily lives and so they would become better problem solvers.

Geography is one of the most important courses taught at schools and also it is one of the most difficult courses to teach (Fairgrieve, 1926). The role of the computers in teaching Technologies has increased especially in the last 20 years of the use of personal computers. There is also major share of the continuous decline in the prices of computers. Thus, many people could have personal computers (Patterson, 2007).

Television, actually a visual tool; transfers its messages to the audience through images. As at a tool, it uses movement and actions rather than words and sounds. It offers

complete images of people and places. It does not expect its audience to dream. In this case, it is a passive tool for teaching environments. Therefore, while using the television in classes there must be regulations to activate the students (Gultig, 2010). Audio-Visual teaching tools and their present modern video versions, T.V's, multimedia devices, slide demonstrators and digital cameras have been an important source and interests for the geography teachers since the first day they were discovered (Kent, 2002).

In their research that is studied the views of social studies teachers regarding the use of smart board, Bulut ve Koçoğlu (2012) stated that 73% of teachers think that social studies course is appropriate for use of smart board and as a reason to this they indicated that the smart board can concretize the abstract concepts and topics, it increases the visuality and persistence and demonstrates active learning opportunities.

Students that have information about computer hardware and software will be able to access the internet and they will be included the magical world of geography. Geography teachers must bring their students into compliance with the latest technological advances. For example; in the U.S.A the national geography society has excellent programs and interactive software and they endear geography to the community with entertainment experiences and meaningful learning activities on the computer (O'Mahony, 2000) According to the finding of some researches, use of online resources supports the basic concepts and skill concept development of students and it also helps them have self-confidence to improve their geographic knowledge (Solem and Gersmehl, 2005).

Computer-based educational media that contributes greatly to the students learning has become an inevitable necessity to use in geography lessons. These technologies can be used in many different ways in geography lessons. For example, PowerPoint can be used in the provision of geographic information and photos. Educational media can be used in geography lessons continuously or periodically to increase students interest in class or for the aim of emphasizing the points that teacher wants to attract the attention. The teacher using educational media in class must keep away from excessive use of it not to be beyond the purpose of the course and the extremely poor and inadequate use of it (Wathore, 2012).

Geo-media is the visualization of the information received from different media sources. Geo-media has a digital content and it works based to location, orientation and position. Many geographic media are widely used for route discovery and navigation. Geo-media brings the real world to class. Constructive and active learning applications such as problem solving, projects-based learning, field work strategies will improve the students'

motivation to learn and will help them fight with the difficulties they encounter in the future (Zwartjes, 2014).

Because of individual, educational and financial reasons, developments in teaching field develop slowly. Only innovation and profession dedicated teachers tend to use information and communication technologies in geography teaching. Different media elements require the use of different teaching methods (Jekel, 2006).

Purpose of the Research

The purpose of this research is to reveal the perceptions of social studies teacher candidates regarding the use of media in geography lessons. In order to achieve this basic purpose, the following questions are expected to be answered:

1. How to reach the information about geography in the written and visual media.
2. Which programs on the internet are known
3. Lecturers' use of media situations in geography lessons.
4. When they are assigned to teaching what are their views regarding to media use in their lessons?

Method

Research Pattern

This research was conducted in accordance with the “pattern of science”, one of the qualitative patterns. In the case studies of science, usually, it is aimed at revealing and interpreting of individual perceptions or point of views to a certain phenomenon (Yıldırım & Şimşek, 2008). In the study, on behalf of selecting close and easy to access situation and also in order to speed the study easily accessible state sampling was used.

Participants

The participants of the survey consist of 134 teacher candidates studying in 2013-2014 academic year spring term, in the Department of Social Studies Education at the Faculty of Education of a state university. 84 of the participants (%62.7) are male, 50 of them (%50.7) are female. 102 (%76.1) of the participants have personal computer but 32 (%23.9) of them do not have. 66 (%49.3) of the participants have a smart phone but 68 (%50.7) of them do not have smart phones. At the end of the 3rd class: General Physical Geography (Mandatory),

General Human and Economic Geography (Mandatory), the Physical Geography of Turkey (Mandatory), Turkey Human and Economic Geography (Mandatory), Political Geography (Mandatory), Bio-geography (Elective) Naturel Disasters and Prevention (elective), Geography of Countries (Mandatory), Geography of Middle East (Elective), Tourism Geography (elective).

Data Collection

In the research semi-structured interview form was used in order to determine the perceptions of social studies teacher candidates in using media for geography lessons. For the content validity of consultation form used in the research, the consultation form was analyzed by field experts and pre-interview was made with five teacher candidates.

Data Analysis

Qualitative descriptive analysis technique was applied in analyzing the data. In data analysis, the data was grouped and interpreted in accordance with predetermined theme. The data is transferred by making excerpts without changing the meaning as it is obtained from the interviews (Yıldırım & Şimşek, 2008). The purpose of this approach is to present the data to the reader in a way as it was obtained from the interviews and observations as arranged and interpreted accordingly.

Findings

In this section of the research it is provided the analysis of the following answers that the social studies teacher candidates are asked in order to determine their perceptions of media use in their geography lessons they have taken in Faculty of Education they studied.

1. How do you find information about geography in written and visual media?

33 teacher candidates “lesson is enough? 128 teacher candidates “internet”, 64 teacher candidates “television”, 54 teacher candidate “written media”, 16 teacher candidate “research books and scientific magazines” in the library and 5 teacher candidates stated that they reach by way of “travel observations”.

K134: Today, we were not taught where we can reach to the geographic information resources. We could find it easily on the internet if we were taught to.

2. Which of the geography software programs on the internet do you know?

When the answers of geography teacher candidates to the question which of the geography programs on the internet do you know? Are analyzed:

“Google Earth: 20 people, Google maps: 1 person, Tübitak: 3 people, Cografyacilar.biz: 1 person, sosyalbilgiler.biz: 2 people, Cografyacim.com: 2 people, National Geographic Turkey: 1 person, Geographical Information Systems: 11 people and Meteorology: 1 person.

They are 44 in total. Other 90 people have no idea about any geography program on the internet.

P.81: I have no idea about this.

P.82: No, because nobody advised, taught us and also it is because the student is passive one.

P.96: We know CBS just as a name; we have not learned the context of it.

P.99: I have just heard a geography software named CBS in classroom but I never heard it before and I don't know the context of CBS program and how it works.

P.124: CBS, I know this software name but I have never used it, I wish we had known.

3. Please evaluate the lectures' use of media situations in geography lessons.

30 of teacher candidates think lectures use of media in geography lessons are sufficient, but other 90 do not think it is sufficient. 6 of teacher candidates stated that no matter how it is but the geography lessons cannot be done sufficiently in the classroom it must be supported with field trips. 3 of teacher candidates stated that teachers do not pay importance to the maps and drawings. And one of the candidates stated that geography lessons are taught teacher-centered but it must be student-centered.

Sufficient

P.28: Lectures enrich the geography lessons with slide and other videos.

P.48: Slide use is beneficial.

P.55: They use is very well. Although there are missing about articulate but still it is good.

P.56: Since the source of our information is internet, it is used actively.

P.66: it is sufficient but it must be developed.

P.79: Slide is highly used both written and visual-image. Video is the most fruitful one in my opinion.

P.102: Our lectures mostly use the written and visual media efficiently.

Not Sufficient

P.19: They must use it. They rarely use it or never do. What they use are only slides. It has to be more developed. They may be videos and information showing how the structures of geography topics are.

P.22: I think lectures do not use internet on geography lessons. They get the information from the books, they write and then they present it to the students.

K25: Generally slides are used, and it is not sufficient. Since the geography pays importance to the visuality it must be used more.

K38: Generally, lecturers tell by reading the presentations they prepared by using PowerPoint. Students do not participate actively in class.

P.42: Geography teachers do the lesson just with PowerPoint slides. They don't bring the internet or other visual materials to the class. They don't use visual materials while teaching.

P.51: Although visual slide use in the class is sufficient I don't think it is convenient to do the lessons just with slide.

P.54: I don't think they are using it in any way. It is told just with a normal slide. And it is not visual, it is written and we just read and pass.

P64: Internet is not used much. The topics are told by visual slides. There is not anything else.

P.67: Academicians convey their thesis and information by way of projection, internet and orally in geography lesson. It is insufficient. Although there are many known academic approach, the lessons are still done with monotonous narration method.

P.68: Even if they try to be active it is insufficient. PowerPoint is used much, but they must know that reading from a slide to tell the lesson is not different than reading from the book.

P.80: I haven't seen the use of internet but downloaded pictures only. This happened is this year in media was told from time to time. Other visuals were also used if needed but it is insufficient and the uses of visuals haven't been taught to us.

P.96: Wholly insufficient. Permanent learning is not provided. Teachers pass it just by reading and talking. A study or material for the class is not used. Thus, the information is useless. There is not a sufficient geography teaching.

P98: Current instructors expect just from the students to find the internet and visual media and bring it to the classroom.

P.99: In geography lessons, lectures do not use the internet, visual and written media efficiently. Thus, sometimes the lesson can be boring. Or they do not use it in right way. I mean they can't do it efficiently to the students in geography teaching.

P.100: They never use it, because they try to teach us the information they took from their own university. They do the same how their own teachers did with them.

P101: Not exactly. However this is not just because of lectures but also the physical deficiency of the classroom.

P.103: Internet, visual and written media are never used in geography lessons but just monotonous narration method is.

P.104: Many lecturers do not use visuals but just book. Thus, we pass the class without having enough skills and information of geography. We just learn the information to pass the exam.

P.105: Usually the textbooks are used in the class. Even the presentations are not effective but just with monotonous narration method. Internet use in classroom is not supported. Geography lesson at university must be used more actual and actual materials must be used more. A trip, observation, internet and written media must be blended with a narration.

P107: Lecturers prefer monotonous narration and they don't use internet and visual media sufficiently. But some of the lecturers can do these.

P112: Use of materials is not much. Oral narration is done to teach. This causes for us to forget the topics easily. It is more permanent when the visual materials are used. But the most used way is drawing things on the board. Sure it is better than nothing.

P.117: I think except a few lecturers there is not anyone using it sufficient level in my university.

P.118: Since the projection is lack in some of the classrooms the lessons are not with visuals and monotonous narration is sufficient. All research, lesson presentation is left to the students since it is called student-centered, so this blocks from reaching the real quality of it.

P126: Most of the lecturers use monotonous narration method. Some of them make students done as they think that it is student-centered. Lecturers are insufficient to use internet, visual and written media.

P.130: they don't use it. While teaching, the lecturers just convey the information they know to the students. Internet, visual and written media are never used.

Land Excursions Must Be Done

P.5: All lecturers use internet and media, but they are insufficient of practicing. If they aim to teach at least the close areas must be taught by visiting. They don't take responsibility about this. They are insufficient.

P.21: The geography education we take now is just given by lessons and presentations. This is convenient to the curriculum but this is not enough. This must be supported by land visits.

P.44: Lecturers presents slides. They sometimes tell by heart. There is not practice or land excursion.

P.57: It is very useful to discuss a topic by using written media in the classroom. It may be better for learning if there is nature excursion. It is better to evaluate about the topic by using internet videos.

P.65: It is not supported with enough visual equipments (videos, image) I haven't included any nature excursion because it was not planned. I see this as a very big deficiency.

P.105: Usually, the materials used in the classes are books. Even the presentations are not effectively but just monotonous narration method. Use of internet is not supported in the classroom. Geography Lessons University must contain more actual topics and visual materials must be used more than this. A narration must be supported with excursion, observation, internet and written media.

P.134: Some of the lecturers make us watch geographic documentaries. Some of them narrate just from the book. I think this is very inefficient. In an effective narration excursions must be forefront. Sometimes websites and visuals are not sufficient.

Maps and Drawings Must Be Used

P.24: Usually, the topics are presented with slides. Geography lessons must be presented with maps and drawings.

P.69: Use of maps and drawings is scarcely any. There should be a map in a corner for each lesson.

P.122: I realized that most of the lecturers narrate the geography lessons limited with the information on the textbooks. Also, I saw that some of the lecturers even don't bring a map to the classroom.

Lesson Must Be Done Student-Centered

P.46: It should be student-centered without staying connected to the book.

4. How do you intend to use the media in your classes when you are assigned to teaching?

When the ideas of social studies teachers candidates' ideas about using technology in geography lessons if they are assigned are examined: 82 of them stated that they are going to use the technology effectively, 16 of them said they will use it if they school they are assigned to is available, 24 of them said they will use technology by PowerPoint slides they searched and did over internet, 4 said they will just use maps and textbooks and other 3 stated that they don't have any plan yet.

According to the opportunities of the school I will be assigned

P.1: I will do my best as a part of the opportunities that the school offers me. I will force the school management to renew and follow the new technological media. I would like my students to learn not by reading but excursion, observation, touching.

P.16: I plan making them watch documentaries. Moreover, if my school has the chance I will do more actual lessons on smart board.

P.59: In scape of the exist tools of time I will teach how it needs to be.

P.60: I will use technology according to the opportunities of the school. If there is not opportunity I will use internet and visual media as a part of my own opportunity, Preparing presentation, videos of related topics, etc.

P.103: In direct proportion to the classroom facilities, and developing them on my own efforts I want to use all the possibilities.

P.117: I am planning to use the internet, visual and written media in my classes as much as I can when I become teacher. Unfortunately, as there aren't the same good facilities in the school around Turkey I will be able to use them according to the opportunities that the school offers me.

I will use media effectively in my classes

P.5: I would like to let my students watch funny and educative films and documentaries telling about countries. I will ask my students to find and bring those things into the classroom.

P.6: I will convey the best information to the students by narrating the lessons with presentations; I will enrich them with short films to reinforce.

P.10: I certainly will use the internet, visual and written media for the topics I am going to teach to be reinforcement and permanent.

P.14: I think to use it a lot. I believe that it will be more permanent. I believe it will be more memorable and permanent for the students.

P.27: I certainly will use it. But, not just presentation, of course. I will use any visual technology for my students to understand.

P.48: I am thinking to get the best benefit of newspapers, online news and information, television.

P.81: Yes, I think about it. Since the internet, visual and written media concrete the course context, this simplifies the learning.

P.91: When I become teacher, I will follow the developing technology and I will use it in a helpful way for my students.

P.92: I will ask my students to find and bring the actual topics to the class and stick them on the board. By this way, I will provide them actual interest. I will let them watch videos like documentary related to the topic I teach them.

P.96: I'll use newspaper, magazine, caricature, etc. convenient to the context of topics. I will bring materials to the classroom. I will make them watch documentary, movie etc. I will make them watch 3D visuals on the internet, especially about geography topics. I mean I will do many things to enjoy my lesson.

P.109: If I become teacher I can teach them more effectively over internet examples, written media and visual element programs.

P.125: I can buy a magazine in each month. We can make a bookshelf in the classroom. Anybody who wants to have an eye on then can do. For the ones who don't have this opportunity. I will try to narrate the topics by using visuals. I can prepare a presentation and narrate. I can give arrange excursion. Everyone may not attend the excursion but the learning could be easier by this way.

P.131: I am thinking to use internet, visual and written media actively when I become teacher. I think they are necessities for teaching effectively and providing active participation of students.

P.133: I am thinking to use internet, visual and written media when I become teacher. I will try to use them more in my classes. If we use them our lessons will be more understanding. As the technology is very important today I will use internet much. I will try to take attention of my students with visual elements. I can activate students with computer games in the classes.

P.134: I am thinking to show the maps colorfully over internet. I can open maps when necessary. I can show real pictures while teaching landforms. If I tell about the earthquakes I can show them a real earthquake video.

By way of presentation, movies, etc. over internet search

P.19: finding important and interesting topics about geography and history on the interest, I can take attention of my students with nice, colorful, vivid slides and present the topic.

P.21: Firstly, I ask students to do internet search, then I show them the presentation, film, documentary or newspaper, magazine that I prepared and finally I arrange excursion related to the topic.

P.22: I search over internet about related topics, and I make students watch movies and documentaries.

P.33: I will use presentations and information on websites.

P.52: To support with actual information, I will narrate the topics with visual slides prepared on the internet and from other sources.

P.56: When I become teacher I am thinking to use slides as visual media. Because slide effective on learning.

P.57: I prepare for that days topic on the internet I prepare a slide, I find maps, images and visuals then I present them to students in the classroom.

P.64: I can address students to trustworthy websites to prepare before the lessons and to revise after that. To make the context more understanding, interesting people and interviews can be shared with the students in the classroom.

Textbooks and Maps are sufficient

P.9: Textbooks are sufficient.

P.17: I am thinking to narrate my lesson first, than planning to bring maps into the classroom and make my students practice on the maps in each lesson 5-10 minutes.

I Don't Know

P.11: I haven't thought it yet. If I become teacher I will decide at that time.

Results, Conclusion and Discussion

The opinions of social studies teacher candidates about the use of media in geography lessons throughout their college education have been analyzed. In the light of the findings, the following results were found.

It is seen that teacher candidates prefer internet most in order to reach geography related information among the written and visual media elements. Research on the internet is usually limited with the simplest level via the search engines such as Google. It is also understood that teacher candidates benefit from television, newspaper, magazine and the books and the periodical magazines in the library besides internet. Also, some of the teacher candidates seem they don't need to use an additional research in geography lessons and they are sufficient with the geography lessons they were presented at university. Those findings are supported with Sharp's (2000) claim putting forward that user-centric and open interactive structure of new technologies are idea for the creation of constructivist learning environment.

Most of social studies teacher candidates seem not to know and use the geography software on the internet. It is understood that a small number of teacher candidates know different geography software but some of them don't use them actively. Many studies'

findings show that majority of the geography teachers participating in research state that game and simulations in geography teaching motivate students in a positive direction while learning geographic patterns and processes (Schee, 2003). If the social studies teacher candidates are familiar with the computer technologies their lessons will be more fun and more memorable environment. The majority of these issues are because of the lack of smart boards in classrooms, the expensive projection; school management etc. sources provided projection explosion is often delayed.

It is seen that most of social studies teacher candidates find the media use of lectures in geography lessons during their university education insufficient. It is understood that some of the candidate teachers find media use sufficient. Some of the candidate teachers want geography lessons to be done by way of land excursions, maps and drawings rather than media use. Dexter and Riedel (2003) put forward that one of the important responsibility of educational institutions is growing up their graduate students with the ability of technology use. This expression is parallel with the result of the research. As it is understood from the expressions of teacher candidates participated in the research, lecturers of geography are insufficient of using technology in their classes. Lecturer's feeling lack of technology use may be among its reasons. After telling that schools have to improve school based technology in accordance with their own needs, Pellegrion, Goldman, Brown, Oney, Nacu and Plants claimed that the responsibility of growing up a teacher means being aware of it and must contain school-based technology use and being used by each teacher candidate freely.

Most of social studies teacher candidates think that lecturers of geography do not use technology sufficiently in their classes. Edelson and Reiser (2006) emphasized that the use of visual technology has a great importance on teaching many subject areas in science and they stated that use of visual technology may differ from discipline to discipline. Therefore, they claimed that teacher's skill in visual technology is scaled with the success of congruent use of technology with its own discipline and its subject. It is understood that most of social studies teacher candidates will use the media while teaching geography lessons when they are assigned to teaching, some of theirs use of media will be within the framework of the opportunities that the school offers them, some others will be sufficient with slides and textbooks. This finding is consistent with opinions of Yazıcı and Demirkaya (2010) about non-currency of technological facilities at the schools they are going to assigned to and therefore it will be difficult for them to use instructional technology in teaching geography-context topics. Today, the use of technological innovations in teaching-learning environment

has become inevitable. Indeed, even if the lessons are done with traditional methods, students can follow the topics by personal data communication (laptops, smart phones, and play stations) and they can integrate with a certain level of technology (Newman and Jones, 2008).

Suggestions

Successful teachers' applications must be video recorded for teacher candidates to use media sources and technology effectively and then those videos may be opened for easy access of teacher candidates on hypermedia. Thus, social studies teacher candidates will have the chance to pattern themselves after social studies teachers with technology-based lesson methods.

Zeichner (2006) put forward that it is not possible to make deep applications appropriate for ideal thinking in isolated university classrooms. Therefore, in order to open a way for teacher candidates to practice in real world it is necessary for tenure institutions and other institutions teachers work in to increase their common study environment and possibilities.

Today, when it is thought that most of the teacher candidates have smart phones and they use it effectively it will be inevitable to transfer these technological simplicities to the teaching-learning environment. However, it will increase the quality of teaching if the teacher candidate, certainly, plans everything and learns all these from experienced people who used these technologies in teaching environment beforehand. Studies conducted on this subject show that students are willing to integrate mobile technologies with their learning process (Knight, 2006; France & Wheeler, 2007).

Some students persist on sticking to teachers' monotonous narration and habit of student's note-taking which are from the traditional teaching-learning environment. This may have various reasons. Culture of technology use must be developed in order to motivate students to convenient technology use in geography lessons. These studies may be done by field experts in faculty of education at universities. So, it can be provided for students to benefit from effective technology use arrangements are made according to which media source is necessary at what stage of the lessons. In order to build a bridge in technological emptiness between geography lecturers working at faculty of education of universities and social studies teacher candidates, lecturers of geography have to generalize the use of geo-

media effectively in the classroom which will support them life-long learning strategies and let them search for real-world problems.

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