Sustainable geography education based on scientific visits at Farhangian University Case study (Campus of Alborz Province)

Valiollah Nazari¹, Ali Sadeghi², Saeedeh Saleimian³

Abstract

Geography education in the modern world today is not just about traditional classes and teaching, but with the help of modern teaching-learning methods, geography education is tried in universities and schools based on interest, facilities, use of new technologies and also important discussion of scientific visits, to be able to create deep and sustainable learning in those interested in the field of geography education. The present study has tried to study the effective results of the comprehensive program of the scientific visits in the field of geography based on eight-semester distributed courses. Descriptive findings of the present study indicate that during the eight semesters of geography education on the campuses of Farhangian University of Alborz Province, regular and continuous scientific visits appropriate to the courses while compiling and planning, have been carried out and effective results in the process of teaching geography and while gaining maximum satisfaction among the student teachers of the two campuses has caused an increase in the level of field education in the two campuses and has influenced the views of officials in this regard and the belief that scientific visits to Farhangian University Sustainable geography has greatly strengthened the contribution.

Keywords: Sustainable Education, Geography, Farhangian University, Scientific Visits, Semester Program of Scientific Visits

¹⁻ Assistant Professor, Department of Humanities and Social Sciences, Farhangian University, Alborz Province.

²⁻ Assistant Professor, Department of Humanities and Social Sciences, Farhangian University, Tehran.

³ Geography Education Expert.

A comparative study of geography education in the educational system of Iran and the United States

Hamid Ahmadi Hedayat¹, Mohadese Sabour²

Abstract

The purpose of this study is a comparative study of geography education in the educational system of Iran and the United States. To achieve the research goal, a qualitative comparative method with a deductive approach was used. The method of data collection and analysis was documentary and rational. Findings indicate that according to the centralized education system in Iran, certain standards have affected the education of geography. In the United States, however, there are several standards for teaching geography due to the decentralized education system. In the United States, teaching geography begins at an early age, but in Iran, teaching geography in junior high school is taught under the title of a book called "Social Studies". Because in the United States, geography is presented only as a summary of each state's unique circumstances, managing, coordinating, and planning geography education is complex. But in Iran, specific books and resources are considered for each course for teaching. One of the most important similarities in geography education in Iran and the United States is the similarity of natural geography topics.

Keyword: comparison, Geography Education, Iran, USA, Education System

¹ Assistant Professor, Department of Educational Sciences, Farhangian University

² Undergraduate student of Geography Education, Farhangian University

Teaching project-oriented course on the basics of remote sensing with the subject of assessing the area of vegetation and agricultural lands of Birjand city through Landsat 8 satellite images

Mohammad Reza Yousefi Roshan¹

Abstract

One of the practical lessons for geography students is the basics of remote sensing. This course was taught in a practical, projectoriented manner according to the topics, this teaching method was very useful, informative and practical for students. After graduating from Farhangian University, students will master the technique of using satellite image download, working with ENVI and Arc GIS software. The aim of this study was to estimate the level of vegetation and agricultural lands of Birjand city through Landsat 8 saw mill images using NDVI index. Birjand city is the center of South Khorasan province. The data used are: data obtained from library sources, statistical data, satellite images of Landsat 8 dated 28/06/2020 AD. Landsat 8 Multi Spectral satellite images of OLI -TIRS sensor in ENVI software version 3.5 were cut with 30m pixel size using Birjand city file slope map, preprocessing, radiometric corrections and atmospheric corrections were performed. The Landsat 8 Panchromatic 8 lane was upgraded to 15 meters. Based on IDL programming language, using NDVI index, ROI of Landsat 8 images was obtained, then threshold output was calculated between maximum 1 and minimum 0.2 and with a Shipe file output in ENVI and Arc Map software, vegetation area and land area Farms of Birjand city have been calculated and concluded on the date of receiving satellite images.

Keywords: Project-oriented teaching, basics of remote sensing, satellite imagery, Landsat 8.

¹ Assistant Professor, Department of Geography, Farhangian University, Tehran, Iran mr.yousefiroshan@cfu.ac.ir

Plain Mokhtaran is a tourism land workshop (Introduction of geomorphic landforms through field visits)

Mohammad Reza Yousefi Roshan², Mohammad Daymevar

Abstract

The land of Iran has high potentials in the field of geo-tourism and tourist attractions at the national, regional and local levels. Mokhtaran Plain in the south of Birjand is a geo-site that has a geological and geomorphological heritage on a small scale. This study is to introduce and evaluate the tourist land attractions of geomorphic landforms of Mokhtaran plain and adjacent areas in the field of tourism growth and development. Mokhtaran plain is geometrically in the form of an elliptical shape with southeastnorthwest extension, which is surrounded by heights and the central part of the plain. The area of Mokhtaran plain is 1264 square kilometers. The various geo-tourism attractions of Mokhtaran Plain include Akbarabad Knock, Nebka, sand dunes, interconnected alluvial fans, Rigi Plain, Giushad Crater in the northwest and Agh Kooh Crater in the south of Mokhtaran Plain. Its tourist attractions have been studied using descriptive-analytical, library and field visits. Easy access from two separate routes, its short distance from Birjand city, the existence of geomorphic landforms in Mokhtaran plain with short distance, Sarbisheh perlite mine, Gourid, Badland basaltic prisms, watershed management measures and suitable opportunities for geo-tourism development in Mokhtaran plain.

Keywords: Field visits, tourist land attractions, Mokhtaran plain.

¹⁻ Assistant Professor, Department of Geography, Farhangian University, Tehran, Iran mr.yousefiroshan@cfu.ac.ir

² Faculty member of Farhangian University, Tehran, Iran daymevar@gmail.com

Assessment Methods in Geography Education: A Systematic Review

Al²Khaki¹, Mojtaba Mahdavi

Abstract

There are hundreds of articles on assessment in geography education. However, these articles differ in their recommendations and conclusions based on research evidence. Globally, evidencebased practice is a priority, and an accurate understanding of what empirical research says about it is essential. A systematic review provides an accurate way to achieve this. In the present study, articles devoted to assessment in geography education were reviewed. The method used in this study was a review and use of library resources. In this study, first, a review of library resources and research in the field of evaluation methods in geography education was performed. All resources used in this article were searched from Google search engine, Science Direct, Google Scholar, Wiley Online and Elsevier. The conclusion of the present study is that clarity is necessary in the following cases: (1) basic geographical knowledge and skills that students should develop; (2) the nature of learning progress in each of these areas and (3) the types of assessment methods that provide valid and reliable criteria for this progress.

Keywords: Evaluation of geography education, Geographical knowledge, systematic review.

1-Assistant Professor of Architecture Department, Technical and Vocational University, Tehran, Iran

² Ph. D. of Psychology and Education of Exceptional Children, Faculty of Psychology and Education, University of Tehran, Tehran, Iran

The Role of Remote Sensing (RS) and Geographic Information System (GIS) in Teaching Geography and Improving the Scientific and Research Level of Students in Schools

Mehdi Moradi¹, Mohamad Naderi², Forough Naderi³, Mehdi Mahmoud Abadi⁴, Masoud Sistani Badooei⁵

Abstract

With the advancement of technology in the world, new technologies are being produced and presented to the world of research. The comprehensive development of research satellites and various software has been one of the advances that has been able to help geographical research and in addition to reducing costs, to study and monitor wider areas accurately and instantly. One of these techniques is remote sensing and GIS, which has received a lot of attention in the country and its development has been so significant that it has been included in school geography books. Practical teaching of these techniques in schools, in addition to increasing learning and research motivation, can flourish the creative and dynamic minds of students and lead them to do research and gain experiences. Therefore, the authors in this study, which was done by library, field and remote sensing methods, introduced some of these techniques, including the study of fluctuations in vegetation and water areas during different years, analysis of urban space expansion in recent decades, calculation of displacement sand dunes in different time periods, have calculated the amount of land subsidence, field visits and the use of UAVs to photograph and make three-dimensional landforms. The need to use these techniques

¹ Ph.D. Student in Urban Planning, General Department of Education, Kerman Province.

² M.S. of Geomorphology, Lecturer at Farhangian University.

³ M.S. of Environmental Geology.

⁴ B.S. in Geography and Urban Planning.

⁵ Ph.D. student in Geomorphology and Environmental Management.