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THE INFLUENCE OF ARAB GEOGRAPHICAL RESEARCH ON PUPILS' GEOGRAPHICAL CULTURE FORMATION

This article examines the influence of Arab geographical studies on the formation of pupils' geographical culture. The analysis of school textbooks has shown that the achievements of Arab explorers and geographers are not sufficiently covered, leading to a one-sided perception of the history of geographical science. The study examined the achievements of Arab scientists, their contribution to world science, and possible ways of integrating this knowledge into the educational process.

The research methodology included the analysis of scientific and historical sources, the study of school curricula, and a pedagogical experiment using new methodological approaches. In the course of approving the proposed methods in school practice, the level of pupils' geographical culture and their ability to analyze the contribution of different civilizations was assessed.

The results of the study showed that insufficient attention to the geographical achievements of the Arab world can be compensated by additional tasks and methodological recommendations for teachers. Introducing international issues into the school curriculum promotes global thinking, critical analysis, and intercultural communication skills. Thus, broadening the content of geography education through the study of Arab studies provides a more holistic view of the development of science.

Key words: Arab geographers, geographical science, geographical culture.

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Араб географиялық зерттеулерінің оқушылардың географиялық мәдениетін қалыптастыруға әсері

Мақалада араб географиялық зерттеулерінің оқушылардың географиялық мәдениетін қалыптастыруға әсері қарастырылады. Жалпы білім беретін мектептердің География пәнін оқытуға арналған оқулықтарын талдау – араб зерттеушілері мен географтарының жетістіктері жеткілікті түрде қамтылмағанын көрсетті, бұл география ғылымының тарихын біржақты қабылдауға әкеледі. Зерттеу араб ғалымдарының жетістіктерін, олардың әлемдік ғылымға қосқан үлестерін және осы білімді білім беру процесіне біріктірудің мүмкін жолдарын қарастырады.

Зерттеу әдістемесі ғылыми және тарихи дереккөздерді талдауды, мектеп бағдарламаларын зерттеуді және жаңа әдістемелік тәсілдерді қолдана отырып педагогикалық экспериментті қамтыды. Ұсынылған Әдістемені сынақтан өткізу барысында мектеп практикасында оқушылардың географиялық мәдениетінің деңгейі және олардың әртүрлі өркениеттердің үлестерін талдау қабілеті бағаланды.

Зерттеу нәтижелері араб әлемінің географиялық жетістіктеріне жеткіліксіз назар мұғалімдерге арналған қосымша тапсырмалар мен әдістемелік ұсыныстармен өтелетінін көрсетті. Мектеп бағдарламасына халықаралық проблематиканы енгізу жаһандық ойлауды, сыни талдауды және мәдениетаралық коммуникация дағдыларын дамытуға ықпал етеді. Осылайша, араб зерттеулерін зерттеу арқылы географиялық білім беру мазмұнын кеңейту ғылымның дамуы туралы біртұтас түсінік алуға мүмкіндік береді.

Түйін сөздер: араб географтары, география ғылымы, географиялық мәдениет.

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Влияние арабских географических исследований на формирование географической культуры школьников

В статье рассматривается влияние арабских географических исследований на формирование географической культуры учащихся. Анализ школьных учебников показал, что достижения арабских исследователей и географов освещаются недостаточно, что приводит к однобокому восприятию истории географической науки. В исследовании рассматриваются достижения арабских ученых, их вклад в мировую науку и возможные пути интеграции этих знаний в образовательный процесс.

Методология исследования включала анализ научных и исторических источников, изучение школьных программ и педагогический эксперимент с использованием новых методологических подходов. В ходе апробации предложенной методики в школьной практике оценивался уровень географической культуры учащихся и их способность анализировать вклад различных цивилизаций.

Результаты исследования показали, что недостаточное внимание к географическим достижениям арабского мира может быть компенсировано дополнительными заданиями и методическими рекомендациями для учителей. Включение международной проблематики в школьную программу способствует развитию глобального мышления, критического анализа и навыков межкультурной коммуникации. Таким образом, расширение содержания географического образования за счет изучения арабских исследований позволяет получить более целостное представление о развитии науки.

Ключевые слова: арабские географы, географическая наука, географическая культура.

Introduction

In modern education, it is important to pay attention to the history of geographical discoveries, as these achievements form the basis of scientific knowledge of the world. However, it is difficult to study in-depth the main stages and contributions of different civilizations because the school curriculum devotes a limited number of hours to this subject. For example, if we focus on the calendar of the renewed geography education, geographical discoveries usually include those of antiquity (Greeks and Romans) and the age of the great discoveries. However, the geographical achievements of the Arab countries, which became a milestone in the development of science, are not sufficiently informed. Even when information is provided, the number of hours specifically allocated to the annual plan is lacking.

In today's educational system, school curricula must devote more time to the study of Arab geographical discoveries. This will enable pupils to gain a deeper understanding of the role of different cultures in the development of science, to appreciate the world's heritage, and to develop a global mindset. Such integrated knowledge contributes to the pupils' geographical culture by giving them a

deeper understanding of the history of geography and intercultural developments.

Geographical culture has an important national and global significance (Figueiredo, 2013) and is an important component of culture as a whole. Geographic culture has great cultural and creative potential, which can be expressed through modern teaching methods and techniques, to solve pressing problems and contradictions. Geographical culture, transmitted by geographical knowledge, plays an important role in public decision-making, such as optimal use of national resources, predicting the consequences of construction projects, improving transport, economic and communication links between regions (Dermendzhieva, & Draganova, 2022).

Geographical culture plays an important role in general education as it helps pupils to develop a holistic perception and objective evaluation of global, regional and local reality:

Geographical literacy involves the acquisition of knowledge, skills and behaviors to perceive and evaluate reality objectively.

Geography education is a pedagogically significant way of working with pupils and contributes to the development of universal social, personal and

general cultural qualities. Geographical culture, as the most important component of culture in general, contributes to the development of a person's humanitarian and ecological awareness. Geographical culture is therefore an integral part of general education. It contributes to the formation of a holistic perception of the world, the development of personality and the social adaptation of pupils (Lauren, 2022).

During the Middle Ages, Arab countries made a major contribution to the development of geographical science. During this period, Islamic scholars systematized the knowledge of antiquity, created new maps, developed astronomy and had a great influence on the climate and the lives of people. The city of Baghdad became a major scientific center, where the works of the ancient Greeks and Romans were translated and original works were created. The geographical achievements of Arab scholars also had a great influence on Europe. This undoubtedly helps education to develop geographical thinking and build geographical culture among pupils. The purpose of the study is to determine the role of geographical knowledge in shaping pupils' geographical culture as a result of Arab geographical development and to develop ways to implement it in the teaching and learning process.

Materials and methods

The study analyzed school geography textbooks to determine the extent to which the achievements of Arab scholars are covered. Methods of comparative analysis, systematization, and synthesis were used to determine which aspects of Arab geography are included in educational programs.

In addition, pedagogical methods such as observing the teaching process, introducing additional tasks, and interviewing pupils to assess their level of geographical culture were used. The results were analyzed in order to propose methodological recommendations for a more in-depth study of the contributions of Arab geographers in the school curriculum. Purpose of the study: Identification of the role of the discovery of Arabic territories in pupils of geographical culture and development of approaches for its implementation in the educational process.

Research problem:

Insufficient attention to the cultural and mass achievements of Arab countries in school geography classes results in pupils' one-sided perception of the history of geographic science and limits their ideas about the contribution of different civilizations to the world's scientific heritage.

Aims of the study:

- Analysis of the achievements of Arab countries in the field of geography and their impact on the development of science.
- Determination of the pedagogical potential of the Arab territories under study for the development of pupils' geographical culture.
- Development of methodological recommendations and approaches for the introduction of international themes of the Arab territories into the school curriculum.
- To validate the proposed pedagogical approaches in school practice.
- Evaluate the effectiveness of the theme according to the geographical culture of the pupils.

Research methodology:

- Theoretical methods: analysis of historical sources, sources of scientific literature, scientific programs, and pedagogical approaches.
- Empirical methods: observation of the teaching process, teaching with new materials, and training to assess the level of pupils' geographical culture.
- This approach not only makes the study of Arab territories relevant but also broadens the pupils' horizons of knowledge and promotes global thinking and intercultural skills.

Literature review

In the heyday of the Muslim world after the fall of the Roman Empire, geographical knowledge expanded greatly as Muslim conquests united vast territories and facilitated the exchange of ideas and trade. As geographical horizons expanded, the Arab world fostered scientific progress. Baghdad became a major center where scholars translated and enriched works on astronomy, geography, and other sciences (Mishra, 2022).

Arab and Muslim geographers of the 3rd century AH (9th century CE) made a clear contribution to the development of geography in their studies, relying on personal observation, research, and investigation during their travels, collecting scientific materials to record and record their experiences and observations (Mousa& Yahya, 2022).

Valuable sources for geographical, toponymic, etymological and historical studies are the works of Arab geographers and travelers, for example, the book of the Syrian geographer, historian and political figure Abu al-Fida (1273-1331) 'Taqwim al-Buldan' – ethno-political history of various territories (Zhuzbaeva, 2023).

The Arab-Islamic geographical heritage contains many treasures for various fields of knowledge, including astronomy and astronomical geography, which have exploited this resource and contributed to the development of science and education.

In addition, the strategic geographical location of the Arab world has played an important role in its historical and contemporary significance:

- Situated at the geographical crossroads of Africa, Asia, and Europe, the Arab world has been a central hub of trade and knowledge exchange for centuries (Fawas, 2023).

- The Arab countries have a unique geographical position linking three continents (Asia, Africa, and Europe), access to the world's major straits through which 70% of world trade passes, and large amounts of fertile land, minerals, and hard-to-reach labour (Sabah, 2023).

The geographical discoveries of the Arabs played a key role in the development of geographical science.

Al-Balkhi contributed greatly to the development of Arab geographical science by writing many books that contributed to its development and progress in social, philosophical, scientific, and economic fields.

Al-Khwarizmi (9th century) played a key role in correcting Ptolemy's erroneous data and establishing the Arabic geographical coordinate system, including the introduction of the concept of the water meridian.

Although Arab scholars made great contributions to science and education, laying the foundations and making many scientific discoveries, their contributions are often overlooked in modern textbooks and curricula (Jawad, 2023).

Thus, the geographical discoveries of the Arabs played a crucial role in the establishment and development of geographical science and contributed greatly to its further development.

Arab geographers of the Middle Ages made significant contributions to the field of geography, including Al-Idrisi's modification of Ptolemy's maps and Al-Biruni's achievements in mathematical geography and geometry. Al-Idrisi, an Arab geographer who lived in the 12th century, updated the map of Europe according to the principles of mathematical geography. Although his work was not widely disseminated after his death, he improved the repre-

sentation of the topography of the Atlantic coast and Europe (Ducène, 2008).

The Arab historian and geographer Ibn Khaldun, who lived in the 14th century, made significant contributions to the field of geography, especially in the areas of regional, philosophical, and astronomical geography.

The famous Arab astronomer, physicist, and geographer Al-Biruni (973–1048) made significant achievements in medieval mathematical geography, especially in the field of geodesy (Sparavigna, 2014).

In addition, Arab geographers and travelers such as Ibn Khurdadbi, Al-Masudi, and Ibn Battuta made significant contributions to the understanding of various regions, including Africa and the Wakwak Islands (Rahman, 2014).

Al-Farabi, a renowned Muslim philosopher and polyglot, classified them into various fields, including geography, and his classification system was found to be appropriate and suitable for use by modern higher education institutions in Malaysia. Al-Farabi's work 'List of Sciences' demonstrated his profound mastery of various fields of knowledge, including geography, and influenced the development of philosophical and scientific thought in the Islamic world and beyond (Nuthpaturahman & Ahmad, 2022).

Al-Farabi's ideas and methods influenced the formation of Kyrgyz philosophical thought, which was reflected in many areas of the people's culture and art, including geography (Mazhiev, 2020), as well as the internationally recognized thinker Al-Farabi, who was for many years a closed subject for the Kazakh people and only in later years began to be finally studied (Kemberbay and Tutinova, 2022).

Results and discussion

Geography is taught in schools from grades 7 to 11. Information about geographers, explorers, and travelers can be found in Section 1 of the textbook. Chapters and topics are usually arranged in a spiral by grade, as shown in the table below:

The table below provides information about Arab geographical discoveries in geography using the example of geography textbooks for general education schools of 7th grade.

Table 1 – General content of the geography textbook


7 to 9 grade	10 to 11 grade	
Chapter 1 Geographical research methods	Chapter 1 Geographical research methods	
Chapter 2 Cartography and geographical databases	Chapter 2 Cartography and Geoinformatics	
Chapter 3 Physical geography	Chapter 3 Environmental Management and Geoecology	
Chapter 4 Social geography	Chapter 4 Geoeconomics	
Chapter 5 Economic geography	Chapter 5 Geopolitics	
Chapter 6 Country studies with the basics of political geography (Russian sample with indication of the book chapters is given in Fig. 1)	Chapter 6 Country Studies	
	Chapter 7 Global challenges facing humanity	

Figure 1 – Chapters reflected in the content of geography textbooks**Table 2** – Contribution of the Arab universes to geographical science

Textbook	Geographical information
Egorina A., Nurkenova S., Shimina E. Textbook for the 7 th grade of secondary school. Almaty: Atamura Publ., 2017, p. 224	During the Middle Ages (V-IX; IX-XV centuries), Arab geographers of the 7 th and 8 th centuries ruled over a vast territory. Military campaigns, trade, and pilgrimages to holy cities required geographical knowledge. The Arabs therefore studied the works of Greek scholars. Arab scientists and geographers wrote many books on the problems of geography. <i>Masudi's</i> work on East Africa is well known. The Khorezm scholar <i>Al-Biruni</i> made a significant contribution to the development of geodesy. While <i>Indrisi</i> was a compiler of Arab maps, the stories of <i>Ibn Batuti's</i> journey have not lost their value to this day (Egorina et al., 2017).
Tolybekova Sh. T., Golovina G. E., Kozina S.S. Geography. Textbook for grade 7 general education. Almaty School: Mektep, 2017. 248 p.	<p>The Middle Ages (V-XV centuries AD) were marked by a general decline in science. The fragmentation and isolation of peoples and different religious beliefs hindered the development of geography. Travelers and explorers played a special role in the development of science at that time. Religious leaders and wealthy citizens were happy to equip expeditions in search of new lands, hoping that they would bring back great riches from distant lands. But it was not just gold, stones, and spices that were brought back from distant lands. When the travelers returned home, they drew maps of the new lands, describing the nature, climate, and people. History records the voyages of the Normans ('people of the north') and the Arabs. The first explored the lands to the north and northwest of Europe (the east coast of North America). The Arabs traveled along the southern shores of Asia (Indian Ocean).</p> <p>The Moroccan missionary, merchant Ibn Battuta (full name Ibn Battuta Abu Abdallah Mohammed ibn Abdallah al-Lawati at. Ganji, 1304-1377), has been called 'the greatest traveler of all time before Magellan'. In 24 years (1325–1349), he traveled 120,000 kilometers by land and sea. He visited the Black Sea, the Arabian Peninsula, and Ethiopia. Bukhara, Samarkand—places unknown to medieval Europeans; through the mountains of Afghanistan he traveled to India, South-East Asia. East Africa reached the equator. His descriptions of countries are considered the most complete geographical works of the Middle Ages (Tolybekova et al., 2017).</p>

Table 3 – Data recorded by geography textbooks and Arab researchers

№	Class / Textbook / Author	Information: yes/no
1	Egorina A., Nurkenova S., Shimina E. Textbook for the 7 th grade of secondary school. Almaty: Atamura Publ., 2017, p. 224	Yes
2	Tolybekova Sh. T., Golovina G. E., Kozina S.S. Geography. Textbook for grade 7 general education. Almaty School: Mektep, 2017. p. 248 p	Yes
3	Karatabanov R. A., Baymetova Zh. R. Geography. For pupils of 7 classes of secondary schools. Part 1. – Almaty: Almaty-book publishing house, 2019. – p. 264	No
4	Geography. Textbook for grade 7, developed under the curriculum of the subject “Geography” for 7-10 grades (variant 2 2016) / S. A. Amangalieva, M. B. Begzhanova, R. A. Karatabanov et al. Astana: JSC ‘Nazarbayev Intellectual Schools’, 2018. –p. 148	No

According to the table above, the textbooks have the same content but different information. The geographical reasoning of Arab explorers and geographers may or may not be taught in Kazakhstani schools because geography textbooks are different. Such a problem can be solved by giving pupils additional tasks.

Pupils will learn about the travelers and scientists presented in the textbook “Where? How? Why?” who worked tirelessly to meet the needs of people and nations and can familiarize themselves with their research and broaden their geographical thinking. Pupils are also asked to read articles on the writings of Arab travelers and geographers as homework. Summarize and evaluate the homework. In order to develop their geographical and critical thinking, teachers ask pupils the following questions:

1. What are the results of your study?
2. What needs of people and nations have been met by the result of their work?
3. In which field of geographical science would you classify the work of the travelers and scientists mentioned above?
4. Which of the explorer’s or scientist’s findings are still relevant today? Why do you think so?
5. What problems were and are being solved by their achievements?
6. Which scientists and travelers can use the results of their research in reverse order? Why do you think so?
7. Which scientists use the results of their research only for moral purposes? Why do you think this is the case?
8. What conclusions can be drawn about the field of this research? (Karatabanova and Baymetova, 2019).

These questions aim to develop pupils’ geographical and critical thinking skills:

Analyze the impact of geographical research on society and the state

- *Questions 1, 2, and 5* encourage pupils to reflect on the practical significance of the discoveries made by Arab geographers. Pupils begin to realize that geography is not just a science of maps but a tool that facilitates trade, government structure, navigation, agriculture, and other areas of life.

Developing classificatory thinking and understanding the structure of geography

- *Question 3* asks pupils to identify which area of geography (physical, socio-economic, cartographic, geo-environmental, etc.) the work of Arab researchers relates to. This develops a systematic understanding of the structure of the science.

Developing historical continuity of knowledge

- *Question 4* encourages pupils to analyze the long-term value of geographical discoveries. Pupils learn to look for relevant examples of research, developing the ability to draw parallels between the past and present.

Reflexivity and Multidimensional Thinking

- *Question 6* requires an unconventional approach: can modern explorers, travelers or scientists use the knowledge gained by Arab geographers in the opposite direction? It invites reflection on the connection between different epochs.

Developing an ethical approach to science

- *Question 7* focuses on the moral side of science. Pupils ask which geographical investigations were used for purely peaceful purposes and which were used for military or political purposes.

Conclusions on the lines of inquiry

- The final question asks pupils to summarise what they have learned and to develop an under-

standing of the natural and social features of the regions studied by Arab geographers.

These questions help pupils develop a holistic view of geography as a science that influences human development. The figure below shows the expected pupils' outcomes.

One of the pedagogical ways to teach pupils about geographical culture is through tasks that require pupils to formulate their thoughts.

The tasks and expected outcomes of the "Reasoning" task ("Formulate your thought") for Grade 7 pupils are presented in the table below:

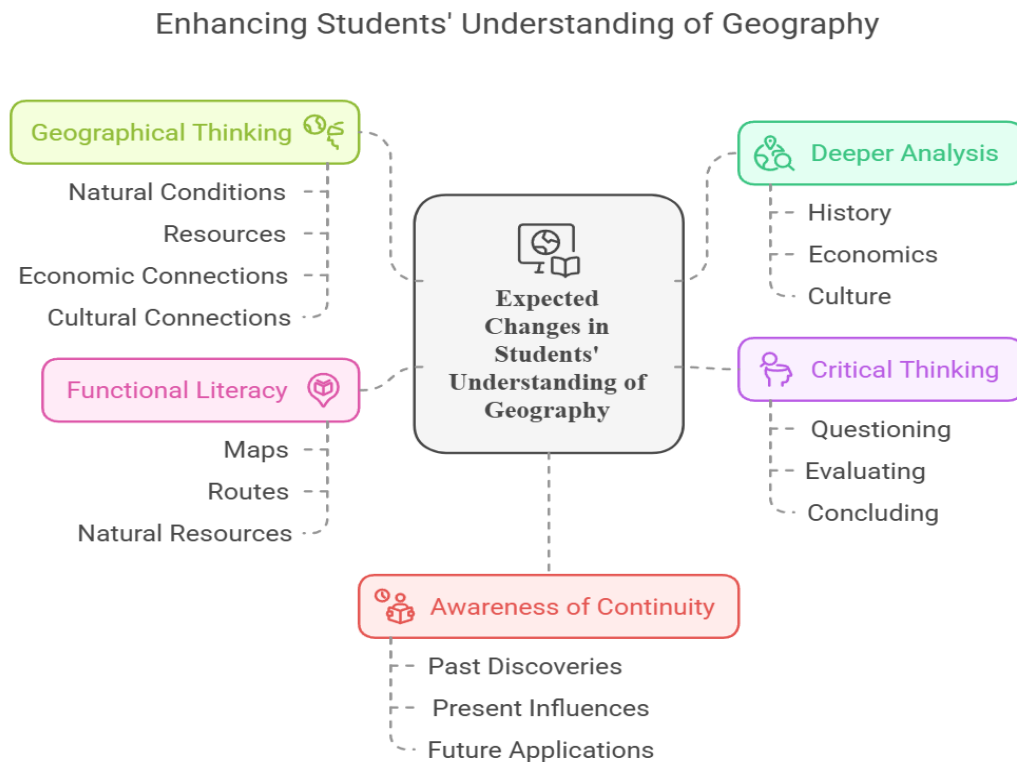


Figure 2 – Interpretation of tasks and their impact on students

Table 4 – “Formulate your thought” tasks

Nº	Issues	Expected results
1	Can geographical research take place outside of people, society, and the state?	Pupils realize that geographical research is always linked to human needs: natural resources, routes, borders, etc.
2	What needs drove people to engage in geographical research and travel? What needs made geographers and travelers known to the world?	They see that geography is not only a science but also a response to the challenges of the time (trade, colonization, science, politics).
3	How have the needs of the state changed from ancient times to the present?	Pupils will see that, whereas geographical research used to focus on the conquest of territory and the search for resources, today it focuses on ecology, climate, and urbanization.
4	Which needs of society and the state are most important today in determining the direction of geographical research?	Current challenges are examined: climate change, urbanization, demography, and sustainable development.
5	Are the results of geographical research and travel always used for human purposes?	Learners analyze the dual role of science: they see that discoveries can bring benefits, but can also lead to conquest.

Continuation of the table

№	Issues	Expected results
6	Give examples of the opposite consequences of geographical discoveries.	The development of science – colonization, environmental problems, inequality – forms an idea of responsibility.
7	What can be done to ensure that geography always serves virtue?	Develops citizenship and an understanding of the humanistic role of science.
8	What geographical discoveries have positively affected the lives of more than a million people? Justify your answers. You can use other sources of information.	Develops skills in analyzing evidence, and looking for examples (e.g. great geographical discoveries, cartography, and climate research).
9	What criteria can be used to evaluate the contribution of scientists and travelers to the development of geographical science?	Pupils learn to evaluate achievements in terms of subject and practical significance, scientific novelty, and scale of impact.
10	Evaluate the contribution of a famous scientist or traveler using the system of “relevant-not relevant”, “argument-not argument”, “global-local”, “positive-negative”, “effective-ineffective”, and “many-few”. One can use the relative level of the quoted price “not always true”, “average level”, etc. Other evaluation methods can be used at one’s discretion (Karatabanova and Baymetova, 2019).	Develops flexible thinking – understanding that scientists’ contributions are ambiguous and require complex analysis.

Seventh-grade tasks are designed to develop reasoning, critical thinking, and the ability to analyze geographical phenomena in the context of society, government, and humanity. Below in Figure 3 is an interpretation of Table 5 in the model.

The proposed tasks contribute to the formation of pupils’ geographical culture by developing analytical, critical, and systematic thinking. Pupils

learn not only to memorize facts but also to understand the meaning of geographical research, its importance for society and the state, and its possible consequences.

Firstly, geographical thinking is developed – pupils understand that geography is linked to history, economics, politics, and science and that the discoveries of scientists and travelers have changed the course of world history.

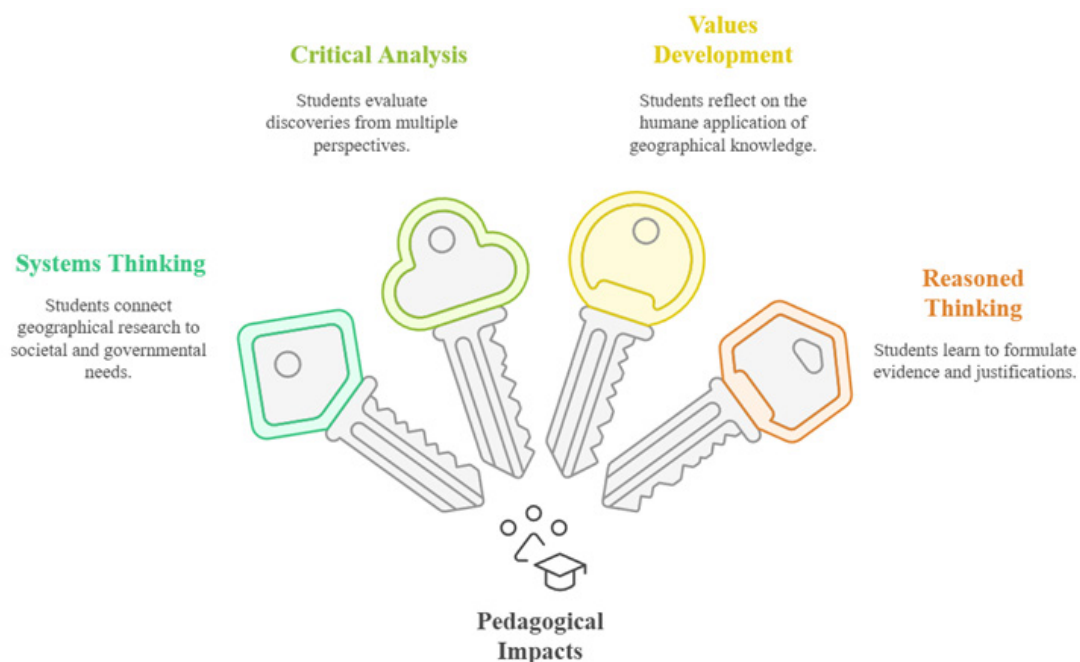


Figure 3 – Findings on the impact of tasks on pupils

Secondly, the tasks encourage critical thinking. They encourage pupils to analyze whether news has always been useful, what negative effects it can have, and why some of it remains relevant centuries later.

Third, pupils begin to appreciate the humanistic role of geography. They realize that knowledge of space, resources, and natural conditions can be used for the benefit or detriment of humanity. This shapes their sense of responsibility for science and their understanding of the importance of ethical use of geographical data.

Fourthly, such tasks develop skills of argumentation and evaluation of information. Pupils learn

to formulate hypotheses, provide evidence, analyze data, and draw independent conclusions.

Thus, the proposed tasks help to develop the ability to think, prove, analyze, and predict the future, which contributes not only to the study of geography but also to the overall intellectual development of pupils.

In order to assess the influence of Arabic geography studies on the formation of the geographical culture of pupils, a SWOT analysis was carried out. It allows identifying the strengths and weaknesses, as well as the opportunities and threats of introducing this subject in the educational process (Table 5).

Table 5 – Research Results: SWOT analysis of the influence of Arabic geographical studies on the formation of the geographical culture of pupils

STRENGTHS	WEAKNESSES
Rich scientific heritage of Arab geographers, including important discoveries in cartography, astronomy, and navigation.	Insufficient representation of Arab geographical exploration in textbooks.
Opportunities to broaden pupils' horizons and develop intercultural awareness.	The limited number of lessons are devoted to the study of the history of geographical discoveries.
Development of pupils' critical thinking skills through analysis of different historical sources.	Lack of methodological guidelines and ready-made teaching materials on the subject.
To complement the teaching material with alternative views on the development of geographical science.	Possible difficulties in adapting complex scientific concepts to pupils' level of understanding.
OPPORTUNITIES	THREATS
Development of new teaching materials that include the achievements of Arab scientists.	Resistance to change in the educational program due to established traditions.
Integrating the topic into the school geography course through project and research activities.	Inadequate preparation of teachers to teach the subject in an interdisciplinary approach.
Use of digital educational technologies to present information (interactive maps, virtual tours, etc.).	Possible lack of scientific and teaching resources for in-depth study of the subject.
Collaboration with historians and orientalists to create educational tools.	Difficulties in perceiving the historical context of the Arab geographical discoveries among pupils without prior training.

The SWOT analysis shows that, despite the existing difficulties, the introduction of the topic of Arab geographical discoveries in school education has significant pedagogical potential. The development of methodological materials and the use of modern educational technologies will help to overcome the existing barriers and contribute to a more complete and objective study of the history of geographical science.

Conclusion

The study analyzed the role of Arab geographical studies in shaping pupils' geographical culture. A comparative analysis of school geography textbooks showed that the contributions of Arab scholars were minimal or absent in some programs. This creates a biased view of the development of geographical science and limits pu-

pils' knowledge of the contributions of different civilizations.

The review examined the major discoveries of Arab geographers and their impact on cartography, navigation, and the study of natural areas. The curriculum analysis showed that references to these achievements are not found in all textbooks and, in some cases, are completely excluded. Ways of remedying this are suggested, including the inclusion of additional tasks aimed at developing pupils' geographical thinking.

The practical significance of the study lies in the development of methodological recommendations for teaching the history of geographical discoveries, taking into account the achievements of Arab scientists. The inclusion of these materials in the

educational process allows pupils to gain a deeper understanding of the diversity of geographical science and its evolution.

The SWOT analysis identified the main strengths and weaknesses of integrating this subject into school education, as well as potential opportunities and threats. It showed that, despite the existing methodological and organizational difficulties, the integration of Arab geography into school courses has a high educational potential. The development of additional teaching materials and the introduction of new pedagogical approaches will help to broaden the content of the geography course, improve the geographical culture of pupils and give them a more holistic view of the development of science.

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