



UMUT JOURNAL

www.umutjournal.com

VOLUME 2 / ISSUE 1 / MARCH 2026

Cilt 2 / Sayı 1 / Mart 2026



Uluslararası Hakemli Dergi
International Peer-Reviewed Journal

ISSN: 3062-3073



UMUT JOURNAL



UMUT

Uluslararası Multidisipliner Tespitler Dergisi

Uluslararası Hakemli Dergi

Cilt 2, Sayı 1 – Mart 2026

ISSN: 3062-3073

INJOMU

International Journal of Multidisciplinary Findings

International Peer-Reviewed Journal

Volume 2, Issue 1 – March 2026

ISSN: 3062-3073



Bu dergideki tüm makaleler turnitin programında taranmıştır.
All articles in this journal have been scanned in the turnitin programme.

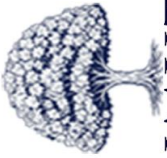
Yayımlanan makalelerde Araştırma ve Yayın Etiğine riayet edilmiş; COPE (Committee on Publication Ethics)'un Editör ve Yazarlar için yayımlanmış olduğu uluslararası standartlar dikkate alınmıştır.

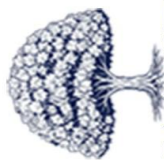
Research and Publication Ethics have been respected in the published articles; the international standards published by COPE (Committee on Publication Ethics) for Editors and Authors have been taken into consideration.

KÜNYE

UMUT JOURNAL

Uluslararası Multidisipliner Tespitler Dergisi
International Journal Of Multidisciplinary Findings





UMUT JOURNAL

Uluslararası Multidisipliner Tespitler Dergisi
International Journal Of Multidisciplinary Findings

İNDEKSLER
INDEXES



UMUT
JOURNAL

İNDEKSLER / INDEXES



Yılda iki kez, **Mart** ve **Eylül** aylarında yayınlanmakta olup, her bir sayı, alanında uzman (Doktor, Doçent, Profesör) hakemler tarafından titizlikle değerlendirilen özgün çalışmaları içermektedir. Dergi, multidisipliner alanlarda özgün araştırmalar, incelemeler ve eleştiriler yayınlamayı amaçlayan hakemli, uluslararası bir akademik dergidir. Dergimiz, Antropoloji, çeviribilim, dilbilim, filoloji, diş hekimliği, eczacılık, edebiyat ve kültürel miras, eğitim bilimleri, ekonomi, güzel sanatlar, halk bilimi, hukuk, ilâhiyat, iktisadi ve idari bilimler, mimarlık, müzik, örgütsel davranış ve liderlik, psikoloji, sağlık bilimleri, sosyal bilimler, tıp, turizm ve işletme, uluslararası ilişkiler, yönetim bilimleri ve diğer ilgili disiplinlerdeki güncel bilgileri, teorik çerçeveleri ve uygulama örneklerini akademik camiaya sunmayı hedeflemektedir.

*It is published twice a year, in **March** and **September**, and each issue contains original studies that are meticulously evaluated by referees who are experts in their fields (Doctor, Associate Professor, Professor). The journal is a peer-reviewed, international academic journal that aims to publish original research, reviews and criticism in multidisciplinary fields. Our journal aims to present current information, theoretical frameworks, and application examples in Anthropology, translation studies, linguistics, philology, dentistry, pharmacy, literature and cultural heritage, educational sciences, economics, fine arts, folklore, law, theology, economic and administrative sciences, architecture, music, organizational behavior and leadership, psychology, health sciences, social sciences, medicine, tourism and business, international relations, management sciences, and other related disciplines to the academic community.*

CİLT | VOLUME 2

/ SAYI | ISSUE 1

/ MART | MARCH 2026

YAYIN DİLİ / PUBLICATION LANGUAGE

Türkçe - İngilizce / Turkish - English

İMTİYAZ SAHİBİ - YAYINCI | PROPRIETOR - PUBLISHER

Emine Şanda

TASARIM | DESING

Oresoft Yazılım Ltd. Şti.

YÖNETİM YERİ VE YAZIŞMA ADRESİ**MANAGEMENT CENTER AND COMMUNICATION**

www.umutjournal.com

editor@umutjournal.com

info@umutjournal.com

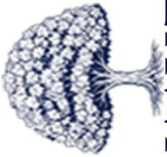
Sırrı Çelik Bulvarı No: 4 Kat: 9/124 Çekmeköy / İstanbul / Türkiye

UMUT JOURNAL'de yer alan makalelerdeki görüşler, bu görüşlerden doğabilecek hukuki ve cezai sorumluluklar, varsa yazım eksiklikleri ve hataları makale sahiplerine ait olup Uluslararası Multidisipliner Tespitler Dergisi'ni - UMUT JOURNAL'i bağlamaz.

The opinions in the articles in UMUT JOURNAL, the legal and criminal responsibilities that may arise from these opinions, and the spelling deficiencies and errors, if any, belong to the article owners and do not bind the International Journal of Multidisciplinary Findings - UMUT JOURNAL.

Bu dergide yayımlanan eserlerin telif hakları yazarlarına aittir. Bu nedenle Uluslararası Multidisipliner Tespitler Dergisi (UMUT JOURNAL) yazarlardan hakem değerlendirme ücreti talep etmez ve makalesi yayımlanan yazarlara ödeme yapmaz. Makaleler, Creative Commons Alıntı-Gayriticari 4.0 (CC BY-NC) Uluslararası Lisansı ile lisanslanmıştır. Lütfen yazar ile iletişime geçmek için iletişim bilgilerinin yer aldığı eserin ilk sayfasına bakınız.

The copyrights of the works published in this journal belong to their authors. For this reason, the International Journal of Multidisciplinary Findings (UMUT JOURNAL) does not demand a peer review fee from the authors and does not pay the authors whose articles are published. Articles are licensed under the Creative Commons Attribution-NonCommercial 4.0 (CC BY-NC) International Licence. Please see the first page of the manuscript for contact information to contact the author.





UMUT
JOURNAL

BAŞ EDİTÖR / EDITOR IN CHIEF

Assist. Prof. Dr. Mehmet Nuri Şanda *Ardahan University - Ardahan - Türkiye*



EDİTÖRLER / EDITORS

Assist. Prof. Dr. Hatice Ertürk *Ardahan University - Ardahan - Türkiye*



Assist. Prof. Dr. Doğan Gün *Mersin University - Mersin - Türkiye*



İNGİLİZCE DİL EDİTÖRLERİ / ENGLISH LANGUAGE EDITORS

Assoc. Prof. Dr. Fatma Köprülü *Near East University - Nicosia - TRNC (Cyprus)*



Assist. Prof. Dr. Bashir Saade *University of Stirling - Scotland - United Kingdom (UK)*



TÜRKÇE DİL EDİTÖRÜ / TURKISH LANGUAGE EDITOR

Prof. Dr. Mustafa Yeniasır *Near East University - Nicosia - TRNC (Cyprus)*



Assist. Prof. Dr. Hatice Veli *Istanbul Gelisim University - Istanbul - Türkiye*



ALAN EDİTÖRLERİ / AREA EDITORS

ANTROPOLOJİ / Anthropology

Prof. Dr. Antonella Minelli *University of Molise - Molise - Italy*



ÇEVİRİBİLİM, DİLBİLİM, FİLOLOJİ / Translation Studies, Linguistics, Philology

Prof. Dr. Natalia Luchianciuc *B.P. Hasdeu State University - Moldova*



Assoc. Prof. Dr. Jozef Stefcik *University of Economics in Bratislava - Bratislava - Slovakia*



ECZACILIK / Pharmacy

Assist. Prof. Dr. Güner Ekiz Dinçman *Near East University - Nicosia - TRNC (Cyprus)*



EDEBİYAT VE KÜLTÜREL MİRAS / Literature and Cultural Heritage

Assist. Prof. Dr. Sandra Guglielmi *University of Molise - Molise - Italy*



EĞİTİM BİLİMLERİ VE PEDAGOJİ / Educational Sciences and Pedagogy

Prof. Dr. Kulash Mamirova *Kazakh National Women's Teacher Training University - Kazakhstan*



EKONOMİ, İKTİSAT, İŞLETME / Economics, Political Economy, Business Administration

Assoc. Prof. Dr. Martin Gress *University of Economics in Bratislava - Bratislava - Slovakia*



Assoc. Prof. Dr. Roşca-S. Liudmila *B.P. Hasdeu State University - Moldova*



HALK BİLİMİ / Folklore

Prof. Dr. Burak Gökbülüt *Near East University - Nicosia - TRNC (Cyprus)*



HUKUK / Law

Assist. Prof. Dr. Ieva Zentelyte *Mykolas Romeris University - Vilnius - Lithuania*



MİMARLIK / Architecture

Assoc. Prof. Dr. Çilen Erçin *European University of Lefke - Lefke - TRNC (Cyprus)*



MÜZİK - SANAT / Music - Art

Prof. Dr. Katarina Eric *University of Kragujevac - Kragujevac - Serbia*



ÖRGÜTSEL DAVRANIŞ, YÖNETİM, LİDERLİK / Organisational Behaviour, Management, Leadership

Assist. Prof. Dr. Cemile Şeker *Near East University - Nicosia - TRNC (Cyprus)*



PSİKOLOJİ / Psychology

Prof. Dr. Rejep Rejepov *Cyprus Aydin University - Kyrenia - TRNC (Cyprus)*



SAĞLIK BİLİMLERİ / Health Sciences

Assoc. Prof. Maral Kargin *European University of Lefke - Lefke - TRNC (Cyprus)*



SOSYAL BİLİMLER / Social Sciences

Assist. Prof. Dr. Yaroslav Pylypchuk *National Pedagogical Dragomanov University - Kyiv, Ukraine*



SOSYOLOJİ / Sociology

Assist. Prof. Dr. Kateryna Bannikova *Kharkiv University of Humanities - Kharkiv - Ukraine*



TIP / Medicine

Prof. Dr. Gülay Durmuş Altun *Girne American University - Girne - TRNC (Cyprus)*



TURİZM VE İŞLETME / Tourism and Management

Assist. Prof. Dr. Özlem Uzunsaf *Near East University - Nicosia - TRNC (Cyprus)*



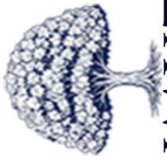
ULUSLARARASI İLİŞKİLER / International Relations

Prof. Dr. A. İnci Sökmen Alaca *Istanbul Arel University - Istanbul - Türkiye*



UMUT JOURNAL EDITÖR KURULU
BOARD EDITORS

UMUT JOURNAL
Uluslararası Multidisipliner Tespitler Dergisi
International Journal Of Multidisciplinary Findings





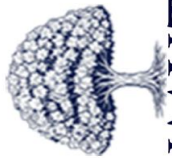
UMUT JOURNAL

BİLİM KURULU / SCIENCE BOARD

Prof. Dr. Peter Benjamin Golden	<i>Rutgers, The State University of New Jersey - USA</i>	
Prof. Dr. Nazife Aydınoglu	<i>International Final University - Kyrenia - TRNC (Cyprus)</i>	
Prof. Dr. Kateryna G. Mykhaylyova	<i>Kharkiv University of Humanities - Kharkiv - Ukraine</i>	
Prof. Dr. Rabije Murati	<i>University of Tetovo - Tetova - Republic of North Macedonia</i>	
Prof. Dr. Mirzana Pasic-Kodric	<i>International University of Sarajevo - Bosnia and Herzegovina</i>	
Prof. Dr. Liailia Mingazova	<i>Kazan Federal University - Kazan - Russian Federation</i>	
Prof. Dr. Aşkın Kiraz	<i>Near East University - Nicosia - TRNC (Cyprus)</i>	
Prof. Dr. Nadiia Stezhko	<i>Kyiv National Economic University - Kyiv - Ukraine</i>	
Prof. Dr. A. Nurdan Atamtürk	<i>University of Kyrenia - Kyrenia - TRNC (Cyprus)</i>	
Prof. Dr. Zhyldyz Urmanbetova	<i>Kyrgyz-Turkish Manas University - Bishkek, Kyrgyz Republic</i>	
Prof. Dr. Mehtap Tiryakioğlu	<i>Near East University - Nicosia - TRNC (Cyprus)</i>	
Prof. Dr. Elçin İbrahimov	<i>Karabakh University - Xankendi - Azerbaijan</i>	
Assoc. Prof. Dr. Behçet Varışlı	<i>International Final University - Kyrenia - TRNC (Cyprus)</i>	
Assoc. Prof. Dr. Eva Jancikova	<i>University of Economics in Bratislava - Bratislava - Slovakia</i>	
Assoc. Prof. Dr. Artea Panajotovic	<i>Alfa BK University - Belgrade, Serbia</i>	
Assoc. Prof. Dr. Jolita Dudaite	<i>Mykolas Romeris University - Vilnius - Lithuania</i>	
Assoc. Prof. Dr. Richard Szanto	<i>University of Szeged - Szeged - Hungary</i>	
Assoc. Prof. Dr. Saida Quliyeva	<i>Baku State University - Baku - Azerbaijan</i>	
Assoc. Prof. Dr. Dragica Zugic	<i>University of Donja Gorica - Podgorica - Montenegro</i>	
Assoc. Prof. Gabriela Dubcova	<i>University of Economics in Bratislava - Bratislava - Slovakia</i>	
Assist. Prof. Dr. Andreja Mihailovic	<i>University of Montenegro - Podgorica - Montenegro</i>	
Assist. Prof. Dr. Radka Stolarikova	<i>Czech University of Life Sciences Prague - Czechia</i>	

BİLİM KURULU
SCIENCE BOARD

UMUT JOURNAL
Uluslararası Multidisipliner Tespitler Dergisi
International Journal Of Multidisciplinary Findings





UMUT
JOURNAL

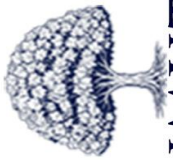
HAKEM LİSTESİ / LIST OF REVIEWERS

- Prof. Dr. Halil Tokcan** *Gazi University – Ankara – Türkiye*
<https://orcid.org/0000-0002-0312-2471>
- Prof. Dr. Ela Ayşe Köksal** *Niğde Ömer Halisdemir University - Niğde – Türkiye*
<https://orcid.org/0000-0001-7309-1458>
- Prof. Dr. Mehmet Çağlar** *European University of Lefke - Lefke – TRNC*
<https://orcid.org/0000-0001-8288-445X>
- Prof. Dr. Ahmet Güneyli** *European University of Lefke - Lefke – TRNC*
<https://orcid.org/0000-0002-2168-1795>
- Prof. Dr. Niginahon Shermuhamedova** *National University of Uzbekistan, Toshkent – Uzbekistan*
<https://orcid.org/0000-0001-6887-2479>
- Prof. Dr. Seitalieva Gulmiza** *International University of Kyrgyzstan*
<https://orcid.org/0000-0002-0498-4591>
- Assoc. Prof. Dr. Adem Çakır** *SBÜ Çanakkale M.Akif Ersoy Devlet Hastanesi – Türkiye*
<https://orcid.org/0000-0002-4966-4882>
- Assoc. Prof. Dr. Hamit Çelik** *Buhara Hastanesi - Erzurum – Türkiye*
<https://orcid.org/0000-0002-8654-2518>
- Assoc. Prof. Dr. Murat Fidan** *Kastamonu University - Kastamonu – Türkiye*
<https://orcid.org/0000-0002-4492-4446>
- Assoc. Prof. Dr. Asil Kaya** *Ardahan University- Ardahan – Türkiye*
<https://orcid.org/0000-0003-2593-5622>
- Assist. Prof. Dr. Elif Yeşiltepe Turşucu** *Ardahan University - Ardahan – Türkiye*
<https://orcid.org/0000-0001-6667-6925>
- Assist. Prof. Dr. Aysel Fedai** *Mardin Artuklu University - Mardin – Türkiye*
<https://orcid.org/0000-0002-7995-4194>

HAKEM LİSTESİ
LIST OF REVIEWERS

UMUT JOURNAL

Uluslararası Multidisipliner Tespitler Dergisi
International Journal Of Multidisciplinary Findings





UMUT JOURNAL

İÇİNDEKİLER / CONTENTS

ARAŞTIRMA MAKALELERİ / RESEARCH ARTICLES

Sosyal Bilimler / Social Sciences

- Makbule Bakırcı** *OSMANLI VERGİ SİSTEMİNDE MALİKÂNE UYGULAMASI VE 19. YÜZYIL DEĞİŞİM SÜRECİ: ADANA SANCAĞI ÖRNEĞİ* **1-37**

Malikâne Practice in the Ottoman Tax System and the 19th Century Change Process: The Case of Adana Sanjak

- Murat Turan** *LÂTİF ÖKTEM ARŞİVİ ÜZERİNE BİR İNCELEME: DİYARBAKIR'DAKİ MAARİF TEŞKİLATI VE RESMÎ TÖRENLER (1927-1929)* **38-62**

An Examination of the Lâtif Öktem Archive: The Education Organization and Official Ceremonies in Diyarbakır (1927-1929)

- Zhyldyz Urmanbetova** *IDEAS OF THE PHILOSOPHY OF CULTURE IN THE CONTEXT OF N. HARTMANN'S PHILOSOPHY OF HISTORY* **63-73**

N. Hartmann'in Tarih Felsefesi Bağlamında Kültür Felsefesine Dair Fikirler

- Kulash Mamirova** *THE CONTENT AND SKILLS OF FUNCTIONAL LITERACY OF STUDENTS IN GEOGRAPHY LESSONS* **74-88**

Coğrafya Derslerinde Öğrencilerin Fonksiyonel Okuryazarlık İçeriği ve Becerileri

Tıp / Medicine

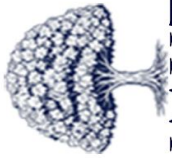
- Ahmet Yatır Murat Yücel Hatice Turan Behçet Varışlı** *THE ROLE OF CLAUDİN-5 İN COVID-19 DİSEASE AS A SEVERE ACUTE RESPIRATORY ILLNESS* **89-106**

Şiddetli Akut Solunum Yolu Hastalığı Olarak COVID-19 Hastalığında Claudin-5'in Rolü

Eğitim Bilimleri / Educational Sciences

- Kainat Firdos Fatma Köprülü** *ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE EDUCATION: A BIBLIOMETRIC ANALYSIS* **107-120**

İngilizce Dil Eğitiminde Yapay Zekâ: Bir Bibliyometrik Analiz





Kulash Mamirova

THE CONTENT AND SKILLS OF FUNCTIONAL LITERACY OF STUDENTS IN GEOGRAPHY LESSONS

Abstract: This article delves into the pivotal concept of 'functional literacy' as it relates to the modern curriculum and instructional methodologies of secondary school geography. It posits that the true mastery of functional literacy is not merely a product of instruction, but is ensured through the student's active and immersive engagement in the cognitive process. Within this framework, students are encouraged to move beyond passive learning to a level where they can effectively analyze and synthesize complex geographical information. By fostering the ability to utilize acquired data across a variety of educational scenarios and to formulate insightful generalizations, the teaching of geography evolves into a tool for practical empowerment. Ultimately, this approach equips students with the essential competencies to navigate, interpret, and solve real-world spatial challenges with intellectual autonomy.

Keywords: Functional literacy, the content and methods of functional literacy, educational tasks, problem solving; the ability to analyze and use skills for communication .

Coğrafya Derslerinde Öğrencilerin Fonksiyonel Okuryazarlık İçeriği ve Becerileri

Özet: Bu makale, ortaöğretim coğrafya müfredatı ve öğretim yöntemleri çerçevesinde kritik bir öneme sahip olan "fonksiyonel okuryazarlık" kavramını derinlemesine incelemektedir. Çalışma, fonksiyonel okuryazarlığın tam anlamıyla kazanılmasının yalnızca bir öğretim çıktısı olmadığını; aksine, öğrencinin bilişsel süreçte aktif ve derinlemesine katılımıyla sağlandığını ileri sürmektedir. Bu çerçevede öğrenciler, pasif öğrenmenin ötesine geçerek karmaşık coğrafi bilgileri etkin bir şekilde analiz etme ve sentezleme becerisi kazanmaya teşvik edilmektedir. Edinilen verilerin farklı eğitim senaryolarında kullanılması ve anlamlı genellemeler yapma yetisinin geliştirilmesi sayesinde, coğrafya öğretimi pratik bir yetkinlik aracına dönüşmektedir. Nihayetinde bu yaklaşım, öğrencileri gerçek dünyadaki mekânsal zorlukları entelektüel bir özerklikle anlama, yorumlama ve çözme becerileriyle donatmaktadır.

Keywords: Fonksiyonel okuryazarlık; fonksiyonel okuryazarlığın içeriği ve yöntemleri; eğitsel görevler; problem çözme; analiz etme yeteneği ve iletişim becerilerini kullanma.



Atf için / How to cite this article (APA 6): Mamirova K.N., (2026). The Content and Skills of Functional Literacy of Students in Geography Lessons. *Uluslararası Multidisipliner Tespitler Dergisi*, 2(1), 74-88.



Prof. Dr., Candidate of Pedagogical Sciences, Professor of the Department of Geography of the Kazakh National Women's Teacher Training University, Kazakhstan, mamirova.kulashgeo@gmail.com
(Corresponding Author / Sorumlu Yazar)



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International Licence. (Bu eser Creative Commons Atf-GayriTicari 4.0 Uluslararası Lisansı ile lisanslanmıştır.)

[RESEARCH ARTICLE / ARASTIRMA MAKALESİ](#)



DOI: <https://doi.org/10.5281/zenodo.19319613>

UMUT Journal, Mart/March 2026, 2(1), 74-88.

ISSN: 3062-3073 - www.umutjournal.com



[ARTICLE HISTORY / MAKALE GEÇMİŞİ](#)

Gönderim (Received): 28.11.2025

Revizyon (Revised): 31.01.2026

Kabul (Accepted): 03.03.2026

INTRODUCTION

Rethinking scientific and methodological approaches in teaching focuses teachers on the need to form and develop students' functional literacy. What do we mean by a student's functional literacy? The meaning of functional literacy is in meta-subjectivity, in going beyond the boundaries of a particular subject, in synthesizing subject knowledge to solve a specific problem. In other words, functional literacy is the ability to apply acquired knowledge and competencies to solve life problems in any field. Nowadays, the life we live shows us that just having academic knowledge in various situations is not enough. Anyone should be able to use the information received in a specific context (Bayanova, 2022, pp.171-173).

A graduate of a secondary school should solve various life situations; critically analyse any social and professional situations; use basic communication skills; build interdisciplinary integration links. These paragraphs should be merged in a paragraph. A paragraph should contain at least three sentences. Be careful on this issue.

The key role of functional literacy is the application of knowledge in real-life situations. The components of literacy are: understanding the essence of the text; knowledge of mathematical calculations; understanding of natural phenomena and processes; financial, information literacy and creative thinking. Critical thinking: teaches you to analyze information and find cause-and-effect relationships. Adaptation: allows graduates to confidently navigate modern society, enjoy their rights and responsibilities. Learning outcome: functional literacy is becoming the main indicator of the quality of education. At school, the development of functional literacy requires a shift from traditional methods to the use of practice-oriented tasks, project activities and interdisciplinary connections, which is confirmed by international studies such as PISA. A number of authors note that functional literacy in school is expressed in the student's ability to use accumulated knowledge and skills to solve life problems in various fields of human activity. Practical adaptation: Preparing students for full-fledged functioning in society, so that they do not get lost in non-standard situations (Bolotnikova, 2019, pp.19-21).

Practical adaptation: Preparing students for full-fledged functioning in society, so that they do not get lost in non-standard situations (Güneş, 2019, pp. 224-246).

Independence: The formation of the ability to think independently of popular culture and critically evaluate information.

Connection with reality: Assistance in modeling life scenarios

- from calculating the family budget to forecasting natural phenomena and processes. A functionally literate person knows how to work with information correctly – to find the necessary data, determine their truthfulness and discard unnecessary information, analyze it, and be able to apply it on their own experience.

At the same time, teachers should help the child form this skill in every lesson in all subjects, because any information may be needed for different spheres of life. The meaning of functional literacy is to expand our understanding beyond a specific subject or to thoughtfully process all knowledge in order to find solutions for a specific task (Göfner, 2023, pp. 62-82).

Recent assessments of students' educational achievements have shown that about a fifth of students do not have functional literacy levels. Such indicators negatively affect the demand for graduates in the labor market and the achievement of their goals in life. People with a good level of education, but functionally illiterate, often become helpless and dependent on the opinions and decisions of others. They become unable to adapt independently in a rapidly changing world, which significantly reduces their quality of life. Many people with higher education lose their jobs just because they are not ready for drastic changes. According to experts, a large number of functionally illiterate population destabilizes the economy of the country and the world as a whole. For this reason, this problem has been taken more seriously.

According to secondary school teachers, the formation of functional literacy of school children helps children understand how learning will be useful in later life. With the understanding of the benefits of a particular skill, the student begins to become more enthusiastic about the lessons. He gets a decent motivation to study. If we take as an example the use of new methods of conducting reading lessons, that older children begin to better understand the meaning of the text, to understand its deep nuances. This creates a love for books, other sources of information, and the cognitive process in general (Gakaev, 2014, pp. 51-52).

There are also many problematic aspects in studying that disappear. The development of critical thinking helps not only to understand the data, but to form it into the necessary chain, analyze it and make an adequate decision. The formation of this skill will help prevent manipulation, which is common in adulthood. As early as school years, the child will begin to form correct concepts, he will not fall under the influence of others, he will be able to easily distinguish falsehood and avoid danger. Analyzing mathematical problems for functional literacy helps children solve many life problems. The teacher may suggest that the children look at and record readings, for example, of the water meter at home, and then determine the amount of payment based on the existing tariff. Schoolchildren really like this approach, they begin to perceive everyday tasks in a different way. Thanks to the modern approach, children learn to apply school and other knowledge in life situations, which significantly develops their thinking.

Currently, functional literacy as a necessary content is presented to one degree or another in the programs of the Geography discipline (Güneş, 2019, pp. 224-246.). According to it, the meta-subject learning outcomes, which are its constituent elements, are evaluated. Various programs and technologies have been developed, but the main problem lies in the lack of this skill among the teachers themselves. Many teachers were educated before this issue was even considered. Therefore, the goal for teachers remains to characterize the necessary information for schoolchildren. Not all teachers can show the rules, possibilities and necessity of applying functional literacy approaches.

Another problem is the presentation of knowledge in a familiar format, which does not develop communication skills. New technologies recommend that the teacher act as a consultant when performing group assignments. In high school, it is recommended to consider life problems and issues that allow students to go beyond their standard thinking. Currently, there are textbooks in schools that always contain tasks for the development of functional literacy. They force children to independently collect the necessary information, systematize and analyze it, and look for creative and non-standard solutions. Subsequently, it is easier for them to give examples, make arguments in favor of their answer and find reasons that do not allow them to accept other options. It is recommended to submit the text to students not only in the standard version, but also in tabular form, graphically with various code values. The ability to work with such information is an important skill.

Materials and methods

An ethical research permit was obtained to conduct the research. It consisted of the following:

- the administration of the experimental school has received ethical permission to conduct this research;
- in the approval of the Ethics committee at the university.

In our study, we consider functional literacy as abilities that combine reading, mathematical, natural science, financial and computer literacy, global competencies and creative thinking. Functional literacy in geography provides the student with the ability to reason, draw conclusions, simulate described situations in real life, for example, independently determine the air temperature, sides of the horizon, wind strength, predict the level of natural or man-made hazards, etc.

Mathematical literacy based on mathematical data makes it possible to predict geographical phenomena and processes, calculate changes in natural components, and make decisions on the protection and rational use of natural resources.

Natural science literacy makes it possible to analyze and compare objects, phenomena and processes in the environment. This competence makes it possible to correctly interpret scientific data, conduct practical research, explain natural phenomena and find existing evidence (Mishina, 2021, pp. 45-46).

Tasks aimed at finding cause-and-effect relationships between phenomena, events, and natural consequences contribute to the formation of global competencies in geography lessons. Therefore, students should be asked to analyze the situation and answer questions in the field of demography, economics, ecology and other global issues.

Creative thinking is associated with the ability to generate your own ideas and offer effective solutions. A critical analysis of situations allows you to see the strengths and weaknesses of any solution or proposal. Creative thinking is associated with meaningful knowledge of the subject and with the creative activity of students (Antonova, 2021, pp. 8-16).

Financial literacy in the field of geography implies that students become familiar with the basic concepts of finance and make decisions to improve the well-being of, for example, a city, region, or country. Students learn to model, for example, situations involving banking products, monetary transactions, and other financial market instruments.

Computer literacy allows you to work with information on the Internet, search and analyze data, select them according to the degree of reliability, use mobile applications, electronic services, know the rules of security and protection of personal information.

The following factors influence the formation of functional literacy of schoolchildren in the classroom:

- the teaching technologies used in the educational institution;
- established educational standards and programs;
- the child's participation in additional courses that develop various skills;
- active participation of parents in the learning process;
- a system for assessing school achievements;
- the ability of the school to adjust the curriculum at its discretion.

The most effective method is considered to be the work of children on a task in a group or in pairs (Gosteva, 2019, pp. 34-56).

Another option for developing functional literacy in schoolchildren is to analyze ordinary product labels or advertising posters. Children are asked to explain why you would purchase or refuse to purchase this product. Every child should carefully read the information provided on the label or advertisement, select important points and analyze them. This will show how important it is to learn a language and other subjects. It is important for teachers to teach children how to work with information. There is so much unreliable information in the public domain now that, without knowing how to analyze it, you can make a lot of mistakes in life. To do this, students are offered to read a certain text taken from the Internet, and then the teacher and the students jointly analyze its imperfections. This method teaches children critical thinking (Kuzmitskaya, 2021, pp.114-118).

The concept of "functional literacy" was introduced in the twentieth century. In 1957, UNESCO introduced the concepts of "minimal literacy" and "functional literacy" for the first time. Functional literacy was a set of reading and writing skills necessary to apply in everyday life and solve daily problems (Göfner, 2023, pp. 62-82).

The definition proposed by UNESCO was considered mainly in relation to the adult population, which needed to develop basic skills such as focusing on solving everyday problems and mastering basic levels of literacy in reading and writing. According to philologist, psychologist and educator A. A. Leontiev, a functionally literate person is considered to be a person who can not only speak and write correctly, but also effectively listen, read and perceive the speech of other people. It includes the ability to use language in social situations, communicate with people of different ages and cultures, and adapt to different communication situations and contexts (Borshchevskaya, 2021, pp. 199-206).

In general, functional literacy involves a flexible and effective command of language that allows a person to function successfully in society and achieve their goals. Functional literacy includes not only the ability to read and write, but also the ability to analyze information, make decisions, solve problems, communicate with other people, and use various technologies and tools. It also includes knowledge of the norms and rules of behavior in a particular cultural environment, the ability to adapt to changing conditions and requirements, the ability to learn and develop. Functional literacy is the foundation for success and self-realization in various areas of life, including education, work, social life, and personal relationships. The development of functional literacy requires constant learning and practice, the active use of acquired knowledge and skills in practical activities. Society and the State have a responsibility to provide opportunities for the development of functional literacy for all its members, including through educational programs and social support (Koval, 2019, pp. 112-122).

Results and discussion

Functional literacy includes not only reading and writing skills, but also the ability to apply these skills in various situations. In today's information society, where knowledge is becoming more accessible and changing faster, functional literacy is becoming a necessary component of education. Interacting with the changing world around you requires the ability to analyze and evaluate information, make decisions, and engage in critical thinking. The student should be able to use various sources of information such as books, the Internet and other means of communication. Solving educational and life tasks requires the ability to build algorithms of actions and apply knowledge in practical situations. The child should be able to think independently and solve problems. An important part of functional literacy is the ability to build social relationships. The child should have an idea of moral and ethical values and be able to apply them in communication with other people. Finally, reflexive skills allow a child to evaluate his literacy, recognize his shortcomings, and strive for self-improvement.

The child should have an interest in education, self-education and spiritual development. Thus, functional literacy today is the basis for successful adaptation to a rapidly changing world and self-realization in it. It helps a child to become an active participant in modern society and develop their abilities to the fullest (Pinskaya, 2019, pp. 50-55).

Forms and methods of functional literacy development

- group work;
- creative tasks;
- test tasks;
- practical work;
- game work (role-playing and business games);
- research and project activities.

Features of functional literacy assessment tasks:

- tasks solved with the help of subject knowledge set outside the subject area;
- each assignment describes a life situation that is understandable to the student;

- the context of the tasks is close to the problematic situations that arise in everyday life;
- tasks of analyzing situations that require an informed choice of a behavior model;
- the questions in the tasks are terse, written in simple language;
- the conditions of the tasks require translation into the language of the subject area;
- the tasks contain drawings, diagrams, and tables (Belovolova, 2016, pp. 55-65).

The pedagogical conditions for the formation of functional literacy as a platform for the development of educational and cognitive competence of students in subjects of the natural science cycle are:

Meaningful terms. They are aimed at ensuring the construction of the content of subjects, taking into account the orientation towards self-knowledge and self-development of the personality of a future specialist based on a competence-based approach. The implementation of this approach takes place through the development of the ability to solve typical educational and professional tasks, as well as tasks of interaction with society based mainly on practice-oriented knowledge (information, scientific concepts, instructions, skills in working with tables, graphs, interpretation and summarization of information);

Technological conditions. They are aimed at providing a technological component of the formation of functional literacy and involve the use by teachers in this process of modern pedagogical technologies for organizing independent work of schoolchildren, initiating independence in determining goals, planning and awareness of their actions (technology of project-based learning, technology for the development of critical thinking);

Organizational conditions. They are aimed at ensuring the inclusion of schoolchildren in the process of forming functional literacy, organizing cooperation based on the establishment of subject-object relations between teachers and students, and applying new forms of assessing students' academic achievements (assessing functional literacy through situational tasks, project presentations, organizing debates, and portfolio formation). The effectiveness of the implementation of pedagogical conditions that ensure the formation of functional literacy as the basis for the development of educational and cognitive competence of high school students in the process of studying natural science subjects is diagnosed according to the following criteria: motivational, cognitive, activity-based, and reflexive, which correlate with the structural components of functional literacy (Bolotnikova, 2019, pp. 19-27).

The motivational component of the functional literacy structure is characterized by a focus on: awareness of one's own educational needs, goals, and value-semantic representations of the content and outcome of activities; active inclusion in the educational space; learning new things in the framework of studying humanities subjects; positive motivation to demonstrate competence. The cognitive component is characterized by a focus on mastering a set of socio-humanitarian, natural and general technical knowledge, mainly of an applied nature. The activity component is characterized by the presence of skills, experience in successfully implementing the necessary actions of independent and research work based on existing knowledge, as well as choosing a way to plan and implement activities to solve various (Güneş, 2019, pp. 224-246.).

The reflexive component is the ability to form short- and long-term plans in accordance with ideas about their true capabilities, goals, and circumstances; to analyze personal activities; and to develop their own position in the process of comparing new information and existing knowledge. The methodology of forming the functional literacy of high school students in the study of natural subjects is based on the use of a fundamental, activity-based, personality-oriented, differentiated approach to building the process of teaching humanities subjects (Gakaev, 2014, pp. 45-56).

The fundamental approach in the implementation of the methodology is a systematic approach that allows us to consider the process of formation of functional literacy in the system, representing the consistent formation of the sphere of communication of functional literacy at different stages of the educational process. When using this approach, the process under consideration acquires a certain

integrity, stability and internal organization. In addition to the systematic approach, activity-based, personality-oriented, and differentiated approaches are also used (Göfner, 2019, pp. 62-82).

The activity-based approach ensures the independent, creative activity of each participant in the educational process, as well as the development of personal experience in communication and working with information. A personality-oriented approach makes it possible to ensure and support the processes of self-development and self-realization of students, the development of their unique individuality. The purpose of this approach is to create such conditions that cognitive activity increases in each lesson and the level of functional literacy in the field of communication increases.

The differentiated approach takes into account the inclinations, interests, and abilities of students when performing various actions and solving standard and non-standard situations. In the process of implementing the methodology for the formation of functional literacy, the principles of consistency, cognitive activity, and value self-determination are used. The principle of consistency determines the importance of the formation of functional literacy in the field of communication in the holistic process of developing key competencies, identifying the level of functional literacy among students associated with the detection of difficulties (Kemalbekova, 2016, pp. 6-9).

The principle of cognitive activity presupposes cognitive activity, in which students are involved in the process of mastering knowledge and forming functional skills: independent acquisition of knowledge, planning and organization of their work. They pose problems and are able to solve them in standard and non-standard situations. Based on the interests of students, this principle allows them to be included in solving problematic situations during discussions, in an independent process of solving functional problems.

The principle of value self-determination assumes that the formation of functional literacy in the field of communication contributes to the development of an independent position in relation to external conditions. The principle of value self-determination is based on the idea of forming functional literacy in the field of communication, which is a significant and valuable result in the study of subjects of the natural science cycle. The considered methodology is aimed at the formation of functional literacy in the field of communication in the process of studying various subjects.

The methodology involves the consistent inclusion of students in increasingly complex educational activities based on the identification of motivation to communicate and study humanities subjects and diagnostic tracking of functional literacy in the field of communication. In the process of forming functional literacy, it provides for the integration of activities relevant to senior school age based on specific subject material, while each student is provided with the opportunity to independently choose the amount of content, means, timing and pace of learning. For example, the method of discussion and debate should be introduced into the practice of working with students of younger adolescence. In older adolescence, the proposed method is most interesting, as it promotes the formation of skills to come into contact with any type of interlocutor and maintain contact in communication, observing norms and rules, listening to the interlocutor, stimulating the interlocutor to continue communication, and changing speech behavior if necessary (Methodological recommendations on the formation and development of students functional literacy skills in the process of geography education in grades 7-11, 2025, pp.120-123).

The project method, presentation protection, creation and demonstration of computer presentations help to overcome difficulties related to personal experiences, feelings of awkwardness, and insecurity. To interpret, systematize, critically evaluate, analyze information from the perspective of the problem being solved, and draw reasoned conclusions is helped by an individual form of work using innovative technologies that must be used from the first lessons of the formation of functional literacy in natural science subjects. Ensuring the integrity of the organization of the educational process, the teacher directs students to the practical application of knowledge in the field of communication through practice-oriented tasks, prescriptive memos, and action algorithms.

The effective implementation of the methodology for the formation of functional literacy of high school students in natural science subjects includes, along with traditional methods of teacher assessment of functional literacy components of knowledge and skills, a teenager's self-assessment of the success of personal experience in communication and working with information in the formation of functional literacy.

Certification of students' functional literacy in natural sciences is the determination of the final level of functional literacy of students at the end of the lesson, after studying the topic (section, module), as well as the course of natural sciences of the secondary school.

Diagnostics of functional literacy of students in natural sciences is the determination of the level of functional literacy of students at the beginning of the lesson, before studying a topic (section, module), a course of natural sciences. Measurement is a quantitative expression of the quality of students' knowledge and skills in conventional units. The result of a measurement, its quantitative, conditionally formal, or symbolic expression, is an estimate. The quality of functional literacy of students in natural sciences is a certain level of assimilation by students of the content of teaching humanities in secondary schools, corresponding to the modern standard of education. There are four levels of functional literacy of students in the humanities: unacceptable, acceptable, sufficient, and high.

According to the results of countries such as Australia, Finland, Japan, New Zealand, Italy, South Korea, etc., which consistently lead the PISA study, the following factors influence the development of functional literacy of students:

- Educational content (national standards, curricula);
- forms and methods of teaching;
- a system for diagnosing and evaluating students' academic achievements;
- extracurricular and additional education programs;
- school management model (public-state form, high level of school autonomy in regulating the curriculum); -the presence of a friendly educational environment based on the principles of partnership with all stakeholders;
- the active role of parents in the process of education and upbringing of school children (Göfner, 2023, pp. 62-82).

The school's educational program, designed to solve the problems of optimizing and improving the effectiveness of the educational process, is one of the main factors in the formation of functional literacy, the content of which is based on the model of competence-based educational content.

As a result of our research, we have established the competencies of functional literacy implemented in geography lessons, these are:

- educational and cognitive competence;
- information; value-semantic
- communicative;
- general cultural;
- personal.

The textbooks of geography of Kazakhstan, published in accordance with the updated geography program, now have contextual tasks that include personally significant content, involving comprehension, analysis, explanation of the situation and the search for ways to solve a socially significant problem.

The content of these assignments is complemented by the main texts of textbooks containing information about important events and problems, including fragments of documents, as well as outlining ways to solve problems.

As a result of the analysis of textbook assignments for functional reading, it was revealed that they basically consist of the following components:

1. Knowledge: find and use words, terms and concepts.
2. Understanding: description, explanation, identification of features of objects and phenomena.
3. Application: formulation of questions, selection of examples, solving educational problems.
4. Analysis: comparison and juxtaposition of objects, verification of data, mental examination.
5. Synthesis: creation of a diagram, plan, instructions, script; development of a website design; creation of a video clip.
6. Assessment: style, form, presentation of material; reliability of information; information as a fact or opinion.

The types of student activities included in the structure of functional literacy in geography were identified:

- navigate the content of the text, structure it, and find the required information;
- interpret and evaluate data, detect inaccuracy and contradiction;
- switch from one form of data representation to another;
- understand information presented in graphic, illustrative, tabular, textual and other forms, interpret it, transform it, generalize it;
- to use the experience of sensory perception of objects, to scientifically substantiate phenomena and processes, to plan research;
- critically consider the problems of global nature and intercultural interaction from different points of view.

To assess the level of functional literacy of students, we prepared the development of atypical tasks, which offered consideration of some real-life problems. Solving these problems required the student to apply knowledge in an unfamiliar situation, to find solutions or ways of doing things, i.e. the creative activity of the students was required.

The main criteria for selecting tasks for the formation and assessment of functional literacy:

- the presence of a problem in the described situation;
- situational significance of the context;
- the novelty of the problem formulation;
- uncertainty in the ways of solving problems (Rudik, 2014, pp. 263-269).

The task toolkit contains the results of experimental work, data analysis, etc. The tasks begin with the words "Try to explain", "What is the reason", "Why", "How to find out", "Justify your answer", etc.

Here are some examples of tasks, for example, to form an understanding of the material being studied.:

1. Read the text and answer the questions. "Nature management is a system of human relations with nature. The components of environmental management are: study, development, transformation and protection of the natural environment. Environmental management can be rational and irrational. Rational use of natural resources is reasonable and does not allow a

decrease in the productivity of the natural environment. Irrational is a consumer attitude towards nature, that is, the desire to get as much as possible from it by any means, which leads to the depletion of natural resources and pollution of the natural environment. Irrational use of natural resources raises two problems: resource-related, related to the depletion of natural resources, and environmental, related to pollution of the living environment. Environmental problems are associated with both population growth and an unprecedented increase in production, as well as imperfect technological processes, and often with environmental illiteracy. Therefore, it is necessary not only to study ways of involving natural resources in human economic activity, but also to find ways and develop measures for the restoration, transformation and protection of natural resources and the natural environment".

2. The task of developing students' worldview. "The activity of human society is highly dependent on the climate. The climate promotes the cultivation of crops and fruit trees, the breeding of animals, etc. Humanity is constantly, consciously or spontaneously, changing the climate, and the higher the level of development of human society, the stronger and more purposeful its influence on the climate. At the same time, the microclimate is mainly affected by changes (as a result of the destruction of forest areas and the planting of forest strips, the creation of reservoirs, etc.). Local climate features may change over a large area; however, this will not cause changes in the macroclimate. There are many projects of artificial macroclimate change. So far, they are technically impracticable, but the development of science and technology is continuously increasing the possibility of their implementation. It must be remembered that changes in one component of nature will inevitably lead to changes in other components, and consequently, changes in natural complexes as a whole. If these changes turn out to be beneficial in some areas, then the associated disturbances in the state of natural complexes in other areas may simply be harmful. Serious geographical research is required in each case to correctly address the issue of climate transformation.

Think about and justify your answer:

A. Using physical and climatic maps, give examples of territories with favorable and unfavorable climate for agriculture.

B. Where on the planet would you like to change the climatic conditions? What would you do to achieve this?

C. Can you imagine how climate changes in the area of your experiments will affect the climate of the surrounding territories and the climate of the planet?

The methodological toolkit of tasks for the formation of functional literacy should contain research-type competence tasks, analysis of primary scientific data, etc. For example, "What happens if...?", "Try to explain" – tasks to explain phenomena and facts; "How do I find out?" – tasks for the application of cognitive methods; "Make a conclusion" – tasks for the formation of skills to draw conclusions based on data.

Practice-oriented tasks occupy a large place among the tasks for the development of functional literacy. Practice-oriented tasks are tasks that are closely related to the surrounding reality, with the formation of practical skills necessary in everyday life. When developing practice-oriented tasks, it is necessary to take into account the subject results of mastering the content of the educational program in the academic subject "Geography": the ability to freely navigate the map, find the most important geographical objects, centers; to solve geographical problems using geographical information and statistical data presented in various forms; to establish the connection of geographical information with spatial and territorial objects, landmarks on the map; to explain the causes and consequences of natural and social phenomena and processes; to use geographical information in communication; to have educated views on the phenomena and processes occurring in nature and society (Eroshina, 2022, pp.391-394).

To form reading literacy, students can be offered tasks on text perception, the ability to extract information and interpret it, draw up diagrams or tables based on text or a geographical map, and

map reading tasks. For example, when studying the topic "Geographical zones and natural zones of the Earth", you can suggest performing the following tasks when working with text (using the example of tropical rainforests): Selective reading.

1. In which parts of the world are tropical rain forests located? What role do tropical rain forests play in the carbon balance of the planet?
2. Information search. List the main reasons for the disappearance of tropical rain forests based on the text you have read.
3. Analytical reading. Why do you think tropical rain forests are home to so many unique plants and animals?
4. Critical reading.

Explain why tropical rainforests are considered one of the most important ecosystems for the health of our planet. A creative task. "Imagine that you are an ecologist working on the conservation of tropical rain forests. Describe the measures that you would propose to protect this ecosystem. Students can be asked to fill out the table using a textbook, defining the climate zone, soils, vegetation, wildlife, and using a map to determine the geographical location of the represented natural area.

Table1. "Characteristics of the climatic zone":

climate zone	soils	the plant world	the animal world	geographical location of the object
--------------	-------	-----------------	------------------	-------------------------------------

The proven ability to compile a table of natural zones will allow you to save time on filling out the table in the future when studying the natural zones of individual continents and will allow you to focus on working with a contour map.

The study of climatic zones can be suggested using the same model. As a result of studying these topics, students should be asked to complete a practice-oriented task: "Where to go on vacation", during which students should choose a natural zone or climate zone, justify their choice of recreation in a particular natural zone or climate zone.

When studying the topics in the section: "Natural zoning of Kazakhstan", you can offer practice-oriented tasks of the following type:

1. To develop a tourist route of the studied natural area, based on the scheme drawn up based on the materials of the paragraph.
2. Come up with a tourist slogan that attracts tourists to the region, based on the plan based on the materials of the paragraph under study.
3. Create an advertising booklet for the natural area, taking into account the text of the textbook. Reading literacy in geography lessons is a must to work with a geographical map. Work with the map should be carried out in each lesson, at any of its stages. Therefore, when working with the map, it is necessary to use the text of the textbook. When working with statistical data, it is possible to offer work on translating information from graphs, diagrams, etc. into text and back.

For example, when studying the "Atmosphere" section in each lesson, you can provide work with local history information. During the practical work, students should be asked to complete the following task: based on the meteorological data obtained, identify dangerous and adverse weather events in their area and compile a memo: "Safety rules for adverse weather events and processes." Mathematical literacy is the ability to identify and understand the role of mathematics in the world, to use it in such a way as to ensure the successful solution of problems and problems of modern society.

Criteria for determining the components of mathematical literacy in geography lessons:

- the ability to read and interpret quantitative information presented in various forms;
- the ability to work with mathematical formulas and numbers.

Taking these criteria into account, students can be offered practice-oriented tasks, for example, on the topic "Terrain plan" in order to study the concept of scale and the application of measurements in practice, we can suggest creating a mini-class plan.:

- measure the length and width of the classroom, and then draw its plan on a piece of paper using a scale; -in order to develop skills in terrain orientation and route planning, students can be offered a task: "Using the school terrain plan, find the shortest path from the school entrance to the gym";
- in order to form the practice of planning and estimating time and distances, students can be asked to complete the task: "Using a map of a nearby park or other interesting place, plan an excursion route.

Consider the distance and time to walk." To instill a responsible attitude towards the environment and show how geographical skills can be applied to solve real-world problems, students can be asked to complete the following task: "Based on the layout of the schoolyard or the nearby park, select the places for garbage collection and justify your choice." Natural science literacy is a person's ability to navigate issues related to natural sciences, willingness to perceive the latest scientific achievements necessary for understanding the world around them, as well as for making appropriate decisions.

An illustrative example of the use of practice-oriented tasks in the formation of natural science literacy is the training sessions during the course "Geography of Kazakhstan". Here you can offer a wide range of tasks from career guidance to the environmental component. Students are particularly interested in assignments based on local history materials: the compilation of booklets "My parents' profession", environmental projects "Ecology of my city", poster defense of "Enterprises of my city". For example, when studying the topic "Light industry", students can be offered the task of compiling a SWOT analysis "Synthetic fabrics: pros and cons". When studying the topic "Building materials industry", tasks related to the construction of various facilities are of interest: cottages, recreation areas; school and classroom repairs.

The tasks of such a plan should be based on work with a textbook and geographical atlases. We can suggest that the students work on problematic issues: identify the range of social problems (the need for housing, the number of schools, kindergartens, social facilities) that may arise if natural growth does not change/increase.; The birth rate will exceed the death rate and vice versa (Methodological recommendations for the development of natural science literacy in geography lessons, 2020, pp.36-38).

School geography has a unique significance in the educational process, as it forms a comprehensive and systematic vision of the world for students. In the context of a practice-oriented approach, geography becomes a tool for the development of functional literacy. This is especially important in modern conditions, when not only knowledge is required, but also the ability to act in a variety of situations (Development of functional literacy of students in geography lessons, 2022, pp.21-25).

Tasks for choosing the explanation that best reflects the described processes. A description of the process or phenomenon with characteristics of individual properties is proposed. It is necessary to choose the correct explanation of the process among the proposed statements.

Task: Read the text and complete the tasks:

1. The lithosphere is the solid shell of the Earth, consisting of the Earth's crust and the upper part of the mantle.
2. The lithosphere consists of lithospheric plates separated by faults.
3. Lithospheric plates move through the plastic layer of the mantle, changing the location of continents and oceans on the Earth's surface.

4. The internal forces of the Earth set in motion the lithospheric plates.

5. When the lithospheric plates diverge, ridges form, such ridges on the ocean floor are called mid-oceanic. 6. Deep-sea troughs form in the ocean at the places where the lithospheric plates collide, and young folded mountains form on land.

What suggestions can be used to draw conclusions about the results of the movement of the lithospheric plates? Justify your answer. The Cyclones and Anticyclones assignment. Every day we want to know the weather forecast and listen to messages about it on the radio, television or on the Internet. Along with information about various weather elements (atmospheric pressure, temperature, humidity, precipitation, wind strength, clouds), the weather forecast also reports on the movement of cyclones and anticyclones. The passage of these huge vortices is associated with great variability in the weather. Why? A cyclone is an area of low pressure with a minimum in the center. An anticyclone is an area of high pressure with a maximum in the center. Signs of a cyclone: 1. Occurs when warm air enters cold air (Analytical materials on the study of the subject "Geography", 2017, pp. 5-10).

Conclusions

Thus, the analysis of the results of geography education in secondary schools shows that the emphasis on achieving functional literacy ensures the student's involvement in the cognitive process, implements the ability to analyze and synthesize information, summarize conclusions and use the data obtained in different learning situations.

At the same time, it has been established that functional literacy in geography lessons in secondary schools is aimed at solving social and social problems, characterizes the personality of a student in a situation of solving a social problem, and determines the student's activity in the classroom.

Along with the above, it has been revealed that the most effective for the development of functional literacy are working in groups, pairs, role-playing, business games, and the project method. By applying these methods, we will be able to nurture an initiative-minded, independent, creative personality.

REFERENCES

- Aitekova, A. R., Orazalieva, G. S., & Zholdasova. (2022). Development of functional literacy of students in geography lessons. *Geography in Schools and Universities of Kazakhstan*, (3), 21-25.
- Analytical materials on the study of the subject "Geography". (2017). Astana. pp. 5-10.
- Antonova, I. A. (2021). Formation of reader's literacy by means of project activity. *Bulletin of Shadrinsky State Pedagogical University*, 1(49), 8-16.
- Bayanova, D. N. (2022). Development of functional literacy of students in geography lessons in schools of the Republic of Kazakhstan. *Young Scientist*, 15(410), 171-173.
- Belovolova, E. A. (2016). On the issue of strengthening the practical orientation of school geography. *Geography at School*, (6), 55-65.
- Bolotnikova, N. V. (2019, May 15). *Formation and development of natural science literacy of students as a necessary condition for achieving learning goals in the geography course*. Materials of the All-Russian Scientific and Practical Conference, Volgograd. pp. 19-27.
- Borshchevskaya, A. (2021). Functional literacy in the context of the modern stage of education development. *Science and School*, (1), 199-206.

- Eroshina, A. S. (2022). Functional literacy and ways of its development in a history teacher. *Young Scientist*, 48(443), 391-394.
- Gakaev, R. A., & Chataeva, M. J. (2014). Teaching geography at school and its importance as an interdisciplinary academic subject. *Scientific Review*, (4), 45-56.
- Gosteva, Y. N. (2019). Theory and practice of assessing reader's literacy as a component of functional literacy. *Domestic and Foreign Pedagogy*, 4(61), 34-56.
- Güneş, F. (2019). Okuryazarlık yaklaşımları. *Sınırsız Eğitim ve Araştırma Dergisi*, 4(3), 224-246. DOI: 10.29250/sead.634908.
- Göfner, B., & Kabapınar, Y. (2023). Okuryazarlık becerilerinin sosyal bilgiler dersinde geliştirilmesine yönelik bir eylem araştırması. *Temel Eğitim Araştırmaları Dergisi*, 5(1), 62-82. DOI: 10.55008/te-ad.1230105.
- Kemelbekova, G. A. (2016). Features of the formation of functional literacy of students in subjects of the humanities cycle. *Problems and prospects of education development: proceedings of the VIII International Scientific Conference*. Krasnodar: Novation. pp. 6-9.
- Koval, T. V. (2019). Global competencies – a new component of functional literacy. *Domestic and Foreign Pedagogy*, 4(61), 112-122.
- Kuzmitskaya, E. V. (2021). Continuous development of reading literacy of students from elementary to high school. *Innovative Science*, (7), 114-118.
- Methodological recommendations for the development of natural science literacy in geography lessons. (2020). Astana: branch of the "Center for Educational Programs" of AEO "Nazarbayev Intellectual Schools". pp. 36-38.
- Methodological recommendations on the formation and development of students functional literacy skills in the process of geography education in grades 7-11. (2025). Astana: NAO named after I. Altynsarın. pp. 120-123.
- Mishina, O. S. (2021). Methodological tools for the formation of natural science literacy in schoolchildren [Electronic text]. *Problems of Modern Pedagogical Education*, 45-46.
- Pinskaya, M. A. (2019). Skills of the 21st century: how to form and evaluate in the lesson? *Educational Policy*, 3(79), 50-55.
- Rudik, G. A., Zhaytapova, A. A., & Stog, S. G. (2014). Functional literacy is an imperative of time. *Lifelong Learning: Continuing Education in the Interests of Sustainable Development*, 12(1), 263-269.

ARTICLE INFORMATION:

Ethics Committee Decision:	<i>The research is exempt from Ethics Committee Decision.</i>
Participant Consent:	<i>No participants were included in the study.</i>
Financial Support:	<i>No financial support was received from any institution or project for the study.</i>
Conflict of Interest:	<i>There is no conflict of interest between the people and institutions involved in the study.</i>
Copyrights:	<i>The study does not contain any images that require copyright. A copyright agreement was signed by me for the article and uploaded to the journal system.</i>

MAKALE BİLGİLERİ:

Etik Kurul Kararı:	Araştırma etik kurul kararından muaftır.
Katılımcı Rızası:	Araştırmada herhangi bir katılımcıya yer verilmemiştir.
Mali Destek:	Çalışma için herhangi bir kurum ve projeden mali destek alınmamıştır.
Çıkar Çatışması:	Çalışmada kişiler ve kurumlar arası çıkar çatışması bulunmamaktadır.
Telif Hakları:	Çalışmada telif hakkı gerektiren herhangi bir görsele yer verilmemiştir. Taraflarca makale için telif hakkı sözleşmesi imzalanıp dergi sistemine yüklenmiştir.