TASKS FOR THE PHENOBL APPROACH

Dushanova Nargiza Mamatkulovna
SamSIFL
Kaliya Kiyasova
Associate Professor, Uzbekali Zhanibekov
South Kazakhstan Pedagogical University, Kazakhstan
kaliya.k.k.68@mail.ru

For the explanation of the interdisciplinary character of the PhenoBL approach, we have chosen the topic of "Climate Change and its impact". The core phenomenon to be investigated is Climate change and its multifaceted impact on natural systems, societies, and global development. This topic can be investigated with the integration of several disciplines, such as environmental science and geography, sociology, economics, political science, ethics, applied linguistics, media studies, technology, engineering, sustainable studies, metacognition, and education. To elaborate on the topic deeper, we have designed several tasks, fitting each discipline.



Task 1: Scientific & Environmental Perspective (Environmental Science, Geography)

Task: Climate Data Analysis

This task is intended to analyze temperature and CO_2 emission graphs from different regions. Here, a teacher can give questions, facilitating students' analytical and interpreting skills, such as What trends have you observed over the past 50 years?, How do these trends differ across regions? What scientific factors explain these changes?", thereby contributing to students' reasoning scientifically, interpreting data, and making evidence-based conclusions.

In the next task, students are asked to elaborate on the social and economic sides of the phenomenon, integrating the key disciplines, sociology and economics. Here, it can be witnessed that students can be introduced to not only academic content, but also their acquisition of linguistic content will be realized by analyzing and comparing the case study. They can examine how climate change affects agriculture in Central Asia and coastal cities in Southeast Asia by answering the questions "What social groups are most vulnerable? How does climate change influence employment, migration, and food security? What economic costs are involved?" Several interdisciplinary contributions can be witnessed, such as socio-economic analysis, comparative reasoning, and contextual understanding, focusing on the development of analytical and evaluative competencies.

The following task enables students to integrate knowledge in Political Science and Ethics. We have termed this task as Political & Ethical Perspective, in which they will be asked to participate in a policy evaluation debate. Evaluation of international climate agreements, such as the Paris Agreement, will be taken for the debate. The following questions will be given in the process:

- Are current policies sufficient?
- Who should bear the greatest responsibility?
- What ethical issues arise between developed and developing countries?

An interdisciplinary contribution can be seen raising the knowledge of Policy literacy, Ethical reasoning, and Argumentation skills, concentrating on developing evaluation and justification competencies.

The next task is aimed at enriching knowledge in Applied Linguistics and Media Studies, engaging them in discourse analysis. The analysis of news articles and speeches on climate change helps them reveal how language constructs meaning, reflects ideology, and shapes social understanding, enabling critical evaluation of texts and communication practices. The guiding prompts can be seen in the questions, including "How is climate change framed linguistically? What persuasive strategies are used? How does language influence public perception?" These, in turn, facilitate critical media literacy, academic, and persuasive language use, discourse

awareness, meanwhile focusing on the development of Critical thinking, synthesis competencies classified as higher-order in Bloom's taxonomy.

The next task, termed as Technology & Innovation Perspective, is intended to integrate Technology, Engineering, and Sustainability Studies, thereby facilitating students' participation in designing a solution project. Here, students design a climate adaptation or mitigation solution for their local context by meeting the criteria of "What technology could reduce emissions or adapt to climate effects? How feasible is your solution economically and socially? How would you present it to stakeholders?" The interdisciplinary contribution can be seen in problem-solving, innovation, and systems thinking by focusing on the development and improvement of creation and synthesis competencies.

Task	Disciplines Integrated	Key Competencies
Data Analysis	Environmental Science, Geography	Analytical thinking
Case Study	Sociology, Economics	Socio-economic reasoning
Policy Debate	Political Science, Ethics	Evaluation, argumentation
Media Analysis	Linguistics, Media Studies	Critical literacy
Solution Design	Technology, Sustainability	Creativity, systems thinking
Reflection	Education, Metacognition	Integrative thinking

Summary table

These tasks present that the comprehension of climate change is not possible through a single discipline. The PhenoBL framework enables learners to integrate scientific, social, economic, political, linguistic, and technological perspectives, thereby improving higher-order cognitive competencies and preparing students for complex real-world problem-solving.

References

1. Abduxajaxanovna S. M., Shukurov U. B. DIGITAL IDIOMS: HOW THE INTERNET IS CREATING A NEW PHRASEOLOGY //JOURNAL OF NEW CENTURY INNOVATIONS. – 2026. – Т. 100. – №. 1. – С. 65-69.
2. Shavkatovna I. Z. MULTILINGUALISM-AN INTERDISCIPLINARY CONCEPT OF SCIENTIFIC RESEARCH //CURRENT RESEARCH JOURNAL OF PEDAGOGICS. – Т. 4. – С. 60-63.
3. Shavkatovna I. Z. MANIFESTATION OF MULTILINGUALISM IN ACADEMIC DISCOURSE //International journal of technology and academic research. – 2026. – Т. 6. – №. 6. – С. 702-704.
4. Kitibayeva A. K., Shavkatovna I. Z. PLURILINGUAL EDUCATION AND INTERCULTURAL COMMUNICATION: CHALLENGES AND OPPORTUNITIES //Arabian journal of science. – 2026. – Т. 13. – №. 6. – С. 2172-2175.
5. Shavkatovna I. Z. THE COGNITIVE BENEFITS OF BILINGUALISM //International Journal of Literature and Language Studies. – 2026. – Т. 5. – №. 6. – С. 1281-1283.
6. Shavkatovna I. Z. Comparing Interference Errors in English OF Uzbek AND Russian L1 Learners //Manuscripts on the Innovative Research and General Scientific Studies. – 2025. – Т. 2. – №. 11. – С. 45-47.
7. Shavkatovna Z. I. The Effectiveness OF Visual Representation Technologies in Improving Plurilingual Competence //European Journal of Innovation in Nonformal Education. – 2024. – Т. 4. – №. 11. – С. 401-405.
8. Shavkatovna I. Z. IMPORTANCE OF THE INTERCULTURAL ASPECT IN TEACHING ENGLISH //CONDUCT OF MODERN SCIENCE-2019. – 2019. – С. 33.
9. Амриддинова Н. Ш. НЕКОТОРЫЕ ОСОБЕННОСТИ ФОРМИРОВАНИЯ АМЕРИКАНСКОГО ВАРИАНТА АНГЛИЙСКОГО ЯЗЫКА //Ученый XXI века. – 2016. – №. 2-4.
10. Амриддинова Н. Ш. МОДИФИКАцИИ ФРАЗЕОЛОГИчЕСКОГО ЗНАчЕНИЯ КАК ДИСКУССИОННАЯ ПРОБЛЕМА СОВРЕМЕННОй ЛИНГВИСТИКИ.
11. Dushanova, N. (2024). Traditional-based learning versus phenomenon-based learning. In *Conference Proceedings: Fostering Your*.
12. Обруева Г. О НЕКОТОРЫХ ОСОБЕННОСТЯХ УПОТРЕБЛЕНИЯ ФРАЗЕОЛОГИЧЕСКИХ ЕДИНИЦ С ИМЕНАМИ СОБСТВЕННЫМИ //ГОЛОВНИЙ РЕДАКТОР. – С. 327.
13. Khamrokulovna O. G. A SEMANTIC ANALYSIS PROPER NOUNS IN COMPARISON WITH THE COMMON NOUN //Shokh Articles Library. – 2026. – Т. 1. – №. 1.
14. Obruyeva G. THE ROLE OF PROPER NAMES IN THE FORMATION OF ENGLISH PHRASEOLOGICAL UNITS //Asian journal of scientific research and innovations. – 2026. – Т. 1. – №. 1. – С. 185-189.

15. Shukurov U. FACTORS IN THE FORMATION OF COGNITIVE-PRAGMATIC COMPETENCE IN THE PROFESSIONAL TRAINING OF ENGLISH TEACHERS //Asian journal of scientific research and innovations. – 2026. – Т. 5. – №. 1. – С. 764-768.
16. Shukurov U. B., Kiyasova K. DEVELOPING COGNITIVE-PRAGMATIC COMPETENCE OF FUTURE ENGLISH TEACHERS THROUGH SCENARIO-BASED SPEECH ACT INSTRUCTION.
17. Shukurov U. B. DIGITAL REFLECTIVE MICROTEACHING AS A METHOD FOR DEVELOPING COGNITIVE-PRAGMATIC COMPETENCE IN FUTURE ENGLISH TEACHERS.
18. Khamrokulovna, O. G. (2025). THE ROLE OF PROVERBS AND IDIOMS IN THE ENGLISH LANGUAGE LEARNING. *INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN EDUCATION, TECHNOLOGY AND MANAGEMENT*, *4*(4), 152-159.
19. Khamrokulovna, Obruyeva Gulchekhra. "A SEMANTIC ANALYSIS PROPER NOUNS IN COMPARISON WITH THE COMMON NOUN." *Shokh Articles Library* 1.1 (2026).
20. Obruyeva, G., & Usmonova, K. (2020). THE USAGE OF JUNCTION IN UZBEK LANGUAGE AS A PRESUPPOSITION TRIGGER. *STUDENT SCIENCE RESEARCH WORKS*, 73.
21. Obruyeva, G. (2026). THE ROLE OF PROPER NAMES IN THE FORMATION OF ENGLISH PHRASEOLOGICAL UNITS. *Asian journal of scientific research and innovations*, *1*(1), 185-189.
22. Jabbarovna S. N. Appearance of the Concept of Assessment in the Artistic Text //European Scholar Journal. – 2022. – Т. 3. – №. 3. – С. 121-125.
23. Suleymanova N. J. CROSS-CULTURAL COMMUNICATION THROUGH LINGUISTIC AND CULTURAL CONTENT //Theoretical & Applied Science. – 2020. – №. 4. – С. 645-647.
24. Sulaymanova N. J. Locative syntaxemes and disaccordance of their antecedent means //Humanities and Social Sciences in Europe: Achievements and Perspectives. – 2016. – С. 249-252.
25. Jabbarovna S. N. Types and usage locative sennas in english and uzbek languages //International Journal of Scientific and Technology Research. – 2020. – Т. 9. – №. 3. – С. 1844-1854.
26. Jabbarovna S. N. DISCURSIVE-PRAGMATIC AND LINGUISTIC FEATURES OF THE EVENT OF THE EVALUATION CATEGORY IN THE LINGUISTIC LANDSCAPE OF THE WORLD (IN THE MATERIAL IN ENGLISH AND UZBEK LANGUAGES) //PalArch's Journal of Archaeology of Egypt/Egyptology. – 2020. – Т. 17. – №. 7. – С. 8303-8312.
27. Сулайманова Н. Ж. Способы выражения локативности в современном английском языке //Актуальные научные исследования в современном мире. – 2016. – №. 9-3. – С. 74-77.
28. Sulaymanova N., Gıyasova N. Özbek ve İngilizce Cümle Yapısında Zarf Değiştiricilerin Karşılaştırmalı İncelemesi //Motif Akademi Halkbilimi Dergisi. – 2014. – Т. 7. – №. 13. – С. 215-221.
29. Sulaymanova N. J. ABOUT DIVIDING SYNTACTIC SEMANTIC FEATURES OF COMPONENTS //НАУКА И ИННОВАЦИИ В XXI ВЕКЕ: АКТУАЛЬНЫЕ ВОПРОСЫ, ОТКРЫТИЯ И ДОСТИЖЕНИЯ. – 2020. – С. 124-128.