



**WORLD BULLETIN
PUBLISHING**

Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X

Volume 2, Issue 10, October 2026



This article/work is licensed under CC by 4.0 Attribution

<https://worldbulletin.org/index.php/1>

USING INTERACTIVE METHODS TO FOSTER STUDENTS' ECOLOGICAL CULTURE IN AN INCLUSIVE EDUCATION SETTING

Khodjayeva Mokhira Mirzamadovna

Independent Researcher, Chirchik State Pedagogical University

Abstract

This article examines how interactive methods can support the development of students' ecological culture in inclusive education. It proposes teaching arrangements that connect environmental knowledge with discussion, cooperative inquiry, practical decision making, and reflection on everyday behaviour. Particular attention is given to accessible materials, flexible participation, individual support, and assessment aligned with shared learning objectives. Examples include environmental scenarios, collaborative observations, role play, and classroom investigations concerning water, paper, and plant care. The article addresses educational practice in Uzbekistan and the preparation of future teachers at pedagogical universities. It is conceptual and methodological, presenting no intervention findings or measured changes in students' behaviour. Its contribution is an adaptable framework for planning and evaluating inclusive environmental learning.

Keywords: Inclusive education, ecological culture, interactive methods, environmental awareness, cooperative learning, accessible participation, environmental responsibility, differentiated instruction, formative assessment.

Introduction

INKLYUZIV TA'LIM SHAROITIDA O'QUVCHILARNING EKOLOGIK MADANIYATINI SHAKLLANTIRISHDA INTERAKTIV METODLARDAN FOYDALANISH.

Xodjayeva Moxira Mirzamadovna

Chirchiq davlat pedagogika universiteti mustaqil izlanuvchisi

 WORLD BULLETIN PUBLISHING Online Publishing Hub	World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X	Volume 2, Issue 10, October 2026
	This article/work is licensed under CC by 4.0 Attribution
https://worldbulletin.org/index.php/1	

Annotatsiya

Mazkur maqolada inklyuziv ta'lim sharoitida interaktiv metodlarning o'quvchilar ekologik madaniyatini rivojlantirishga ko'maklashish imkoniyatlari ko'rib chiqiladi. Ekologik bilimlarni muhokama, hamkorlikdagi izlanish, amaliy qaror qabul qilish va kundalik xatti-harakatlarni tahlil qilish bilan bog'laydigan ta'limni tashkil etish usullari taklif etiladi. O'quvchilar uchun qulay materiallar, moslashuvchan ishtirok shakllari, individual yordam hamda umumiy o'quv maqsadlariga muvofiq baholashga alohida e'tibor qaratiladi. Misollar ekologik vaziyatlar, hamkorlikdagi kuzatishlar, rolli o'yinlar hamda suv, qog'oz va o'simliklarni parvarishlashga oid sinf tadqiqotlarini qamrab oladi. Maqolada O'zbekistondagi ta'lim amaliyoti va pedagogika oliy ta'lim muassasalarida bo'lajak o'qituvchilarni tayyorlash masalalari yoritiladi. Maqola konseptual va metodik xususiyatga ega bo'lib, unda pedagogik tajriba natijalari yoki o'quvchilar xatti-harakatlaridagi o'lchangan o'zgarishlar keltirilmaydi. Uning ahamiyati inklyuziv ekologik ta'limni rejalashtirish va baholash uchun moslashtiriladigan metodik asosni taqdim etishdan iborat.

Kalit so'zlar: Inklyuziv ta'lim, ekologik madaniyat, interaktiv metodlar, ekologik xabardorlik, hamkorlikda o'rganish, barcha uchun qulay ishtirok imkoniyatlari, ekologik mas'uliyat, differensial ta'lim, shakllantiruvchi baholash.

Introduction

Ecological culture involves understanding environmental relationships, recognising the consequences of human actions, and making responsible decisions in everyday situations. School education can support its development by connecting knowledge with opportunities to observe, discuss, and practise environmentally considerate behaviour. However, information about environmental problems does not automatically translate into informed action. Students need learning experiences that encourage questioning, comparison, cooperation, and reflection.

Interactive methods offer opportunities to explore environmental issues through dialogue and shared activity. In inclusive settings, their value depends on

 WORLD BULLETIN PUBLISHING Online Publishing Hub	World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X	Volume 2, Issue 10, October 2026
	This article/work is licensed under CC by 4.0 Attribution
https://worldbulletin.org/index.php/1	

whether every student can participate meaningfully. Differences in communication, language, mobility, sensory access, and prior knowledge require careful planning. Participation should not be judged solely through frequent speaking or independent performance; practical contributions and supported responses can also demonstrate learning.

In Uzbekistan, familiar situations involving water use, paper consumption, plant care, and school surroundings can provide relevant contexts for environmental education. Activities should reflect available resources and local conditions without assuming identical experiences among students. For pedagogical universities, preparing teachers to organise accessible interaction is therefore an important methodological task. This article examines interactive approaches for developing ecological culture, explaining adaptations, teaching procedures, and assessment considerations. It presents conceptual recommendations rather than claims based on an implemented classroom intervention or outcomes.

Main part

Interactive environmental learning begins with a clear objective and an accessible question. Teachers might ask how classroom paper use can be reduced or what plants require to remain healthy. Questions should be specific enough for students to investigate using available resources. Before introducing an activity, teachers identify relevant prior knowledge and potential participation barriers. Brief conversations, pictures, objects, and demonstrations can reveal whether difficulties concern environmental concepts, unfamiliar vocabulary, or the format of instructions. This information guides adaptations without assigning permanent ability labels or assuming that a diagnosis determines participation.

Environmental scenarios provide opportunities to compare decisions and their consequences. A teacher may describe a situation in which a tap continues running after handwashing and invite students to propose appropriate responses. Students can communicate through speech, writing, pictures, gestures, or supported choices. Discussion should distinguish water conservation from practices that compromise hygiene. Teachers ask students to explain their reasoning and consider practical constraints. The purpose is not to reward a

 WORLD BULLETIN PUBLISHING Online Publishing Hub	World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X	Volume 2, Issue 10, October 2026
	This article/work is licensed under CC by 4.0 Attribution
https://worldbulletin.org/index.php/1	

predetermined slogan but to develop understanding of why an action is appropriate and when assistance from an adult is necessary.

Cooperative inquiry connects environmental ideas with observation. Small groups can examine paper discarded during classroom activities, using only clean, safe materials. Roles may include observing, sorting, recording, and presenting findings. These roles should remain flexible so that students can explore different contributions with appropriate support. Visual instructions, manageable task stages, accessible workspaces, and additional response time can broaden participation. Findings should be described accurately: observing unused paper suggests an opportunity to reduce waste, but it does not establish a quantified environmental benefit unless suitable measurements and comparisons have been conducted.

Role play and shared problem solving can help students examine different perspectives. For example, groups may discuss how to organise a classroom plant corner when participants have different responsibilities and access needs. Teachers can introduce fictional characters who suggest alternative arrangements, allowing students to assess fairness, feasibility, and plant requirements. Reflection should address both environmental reasoning and participation. Students are not required to disclose personal difficulties or accept fixed helper roles. Peer assistance can facilitate interaction, but it should not replace teacher support or allow one student to complete another's learning task. Assessment should examine environmental understanding, decision making, and contributions across repeated activities. A poster alone cannot demonstrate ecological culture, and correct answers do not establish lasting behaviour change. Teachers can combine observation, brief explanations, and subsequent tasks to identify how students apply ideas. Records should distinguish independent responses from supported responses while maintaining comparable criteria for shared objectives. At pedagogical universities, students can practise adapting scenarios and analysing participation. Future evaluation should investigate feasibility, resource demands, and transfer into everyday behaviour before attributing developmental outcomes to these proposed methods. It should also examine whether activities preserve student agency, provide meaningful challenge, and enable participation across different classroom conditions. Such

 WORLD BULLETIN PUBLISHING Online Publishing Hub	World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X	Volume 2, Issue 10, October 2026
	This article/work is licensed under CC by 4.0 Attribution
https://worldbulletin.org/index.php/1	

investigation would support evidence informed refinement of inclusive environmental teaching and assessment practices.

Conclusion

Interactive methods can provide a practical framework for connecting environmental knowledge with discussion, observation, cooperation, and responsible decision making. Their contribution to inclusive education depends on accessible materials, flexible roles, appropriate support, and opportunities for every student to express understanding. Teachers should preserve clear objectives while adapting communication and participation arrangements.

Environmental scenarios, cooperative investigations, and role play can draw on familiar classroom situations without requiring expensive resources. Assessment should examine reasoning and application rather than rely exclusively on products, slogans, or visible enthusiasm. Lasting behavioural change requires observation beyond a single activity.

For pedagogical universities in Uzbekistan, teacher preparation should include designing accessible environmental tasks, analysing participation, and planning contextual assessment. This article offers methodological recommendations rather than verified intervention results. Further research should examine feasibility, learning, equitable participation, and transfer into everyday practices, providing a stronger basis for refining interactive approaches across diverse inclusive classrooms and ordinary school settings.

References

1. Mavlonova, R. A., & Rahmonqulova, N. H. (2009). Boshlang'ich ta'limning integratsiyalashgan pedagogikasi [Integrated pedagogy of primary education]. Ilm Ziyο.
2. Ishmuhamedov, R. J., Abduqodirov, A. A., & Pardayev, A. X. (2008). Ta'limda innovatsion texnologiyalar [Innovative technologies in education]. Iste'dod.
3. Tolipov, O'. Q., & Usmonboyeva, M. (2006). Pedagogik texnologiyalarning tatbiqiy asoslari [Practical foundations of pedagogical technologies]. Fan.



**WORLD BULLETIN
PUBLISHING**

Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X

Volume 2, Issue 10, October 2026



This article/work is licensed under CC by 4.0 Attribution

<https://worldbulletin.org/index.php/1>

4. Azizxo‘jayeva, N. N. (2006). Pedagogik texnologiyalar va pedagogik mahorat [Pedagogical technologies and pedagogical mastery]. O‘zbekiston Yozuvchilar uyushmasi Adabiyot jamg‘armasi nashriyoti.
5. Palmer, J. A. (1998). Environmental education in the 21st century: Theory, practice, progress and promise. Routledge.